The American Artisan
And Hardware Record

Vol. 47—No. 18. CHICAGO, APRIL 30, 1904. $2.00 per Year.

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The "COLUMBUS"

EMERY WHEEL DRESSER

Does the work FASTER and BETTER than any other. The device is the result of long experience in our own shops.

Handle with 6 Cutters sent by express on receipt of $1.00.

COLUMBUS BOLT WORKS, - - Columbus, Ohio.

A postal card will bring our General Catalog.

TINNERS FIND EMPLOYMENT

By advertising and using THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give tinners employment making stocks, and give the dealers profit.

Sold by Hardware Jobbers and Dealers.

Made only by POWERS BROS. STREATOR, ILL.

This cut free to dealers.

Atlas Bolt & Screw Co.

CLEVELAND, O.

Manufacturers of

Stove Bolts
Stove Rods
Stove Rivets
Mica Bolts
Fancy Nuts
Register Pins
Hinge Pins

and kindred articles for the

STOVE and RANGE Manufacturing Trade

URE ASPHALT ROOFING

NEVER DRIES OUT OR CRACKS

Our Tarred Ready Roofing, Slaters' Felt, Building Paper, Roofing Cements, Paints, Etc.

WRITE US FOR PRICES

L. PERKINS & CO., 235 Lake Street, CHICAGO

NOTICE.

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and continent. References furnished.

ADDRESS

EXHIBIT & TRADING CO.

Main Office, 153 Duke St.

LIVERPOOL, - ENGLAND

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are doing—but—nobody—else—does.

April Showers Bring Forth

many things besides May flowers—as rust and corrosion to an unprotected roof—increases and enlarges small leaks. Now's the time to prepare your roof for the rainy season—stop the small leaks and openings by using AMERICAN SEAL ELASTIC OIL CEMENT. This cement will stop the largest or smallest leak that may exist in any roof. Won't harden, thereby increasing its non-breakable qualities. Economical considering the difference in price and results of the High Priced plumber.

PRICES ON APPLICATION.

Wm. Connors Paint Mfg. Co., TROY, N. Y.

Black Diamond Files and Rasps

PERFECT—ALWAYS

TWELVE MEDALS AWARDED

AT INTERNATIONAL EXPOSITIONS

G. & H. BARNETT CO.

Black Diamond File Works, PHILADELPHIA

"TRIUMPH" CHAIN HAS TWICE THE STRENGTH OF WELDED.

SEND FOR FREE SAMPLES, TABLE OF TESTS AND ASK QUESTIONS.

THE BRIDGEPORT CHAIN CO., BRIDGEPORT, CONN.

OVER TEN MILES OF CHAIN PER DAY. WE LEAD.

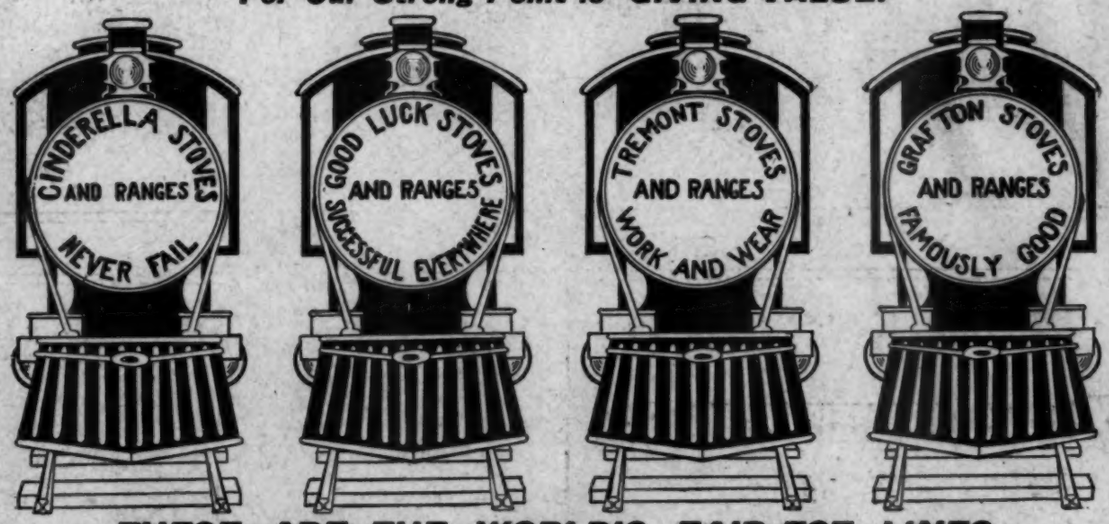
"Have a look." St. Louis' invitation to the world.

Those who visit the St. Louis Fair will likely learn that a native Missourian has great confidence in his eyesight. Missouri is the land where positive assertions are met with that world famous challenge,

"YOU WILL HAVE TO SHOW ME."

We hope that the Fair will spread this sentiment—

For Our Strong Point is—GIVING VALUE.



THESE ARE THE WORLD'S FAIR-EST LINES.

You may hunt the big "Big Show" over from ***"The Cascades to The Pike"*** and you will not find more honest goods than ***Pittsburgh Stoves & Ranges.*** Their Quality is Above Suspicion.

Pittsburgh Stove & Range Co.,

PITTSBURGH, PA.

The End of It.

Our new pouch feed is now completed and is an artistic and valuable addition to the

MODEL STEEL RANGE

The Good Points of Our New Pouch Feed:

Large pouch for broiler door (fitted with register); large drop draft door (fitted with register); perfect control of fire; large water heater; easy access to fire box with poker; duplex grate for coal or wood; large nickeled plain wood feed door; no extra linings necessary for perfect coal fire box or perfect wood fire box.

There are other points of which we can't tell you here. Write us for more.

THE PORTSMOUTH STOVE & RANGE CO.

PORTSMOUTH, OHIO.

MORLEY BROS., SAGINAW, MICHIGAN, WHOLESALE AGENTS FOR MICHIGAN.

Get Our Prices

ON cast cooks and ranges, steel cooks and ranges, Malleable ranges, Base Burners, Oaks, Hot Blast, Warm Air and Combination Furnaces, Steam and Hot Water Heaters.

We have the finest storage facilities of any western stove house.

Our Warehouse **A.**

We have the finest shipping facilities of any western stove house.

No order too large for immediate shipment.
No order too small for prompt attention.

JOHN KONTNY

STOVE SPECIALIST AND HEATING EXPERT

65-67 N. DESPLAINES ST., CHICAGO

"Steel Leader" Ranges

1904 MODEL

LEADERS in

Quality, Beauty, Price

The Best Sellers in the World.
We make a full line of Moderate Priced Coal, Gas and Wood Ranges, Cooks and Heaters

The LATTIMER-WILLIAMS MFG. CO.

COLUMBUS, OHIO.

1904 Catalogue now ready.

M
TRADE MARK

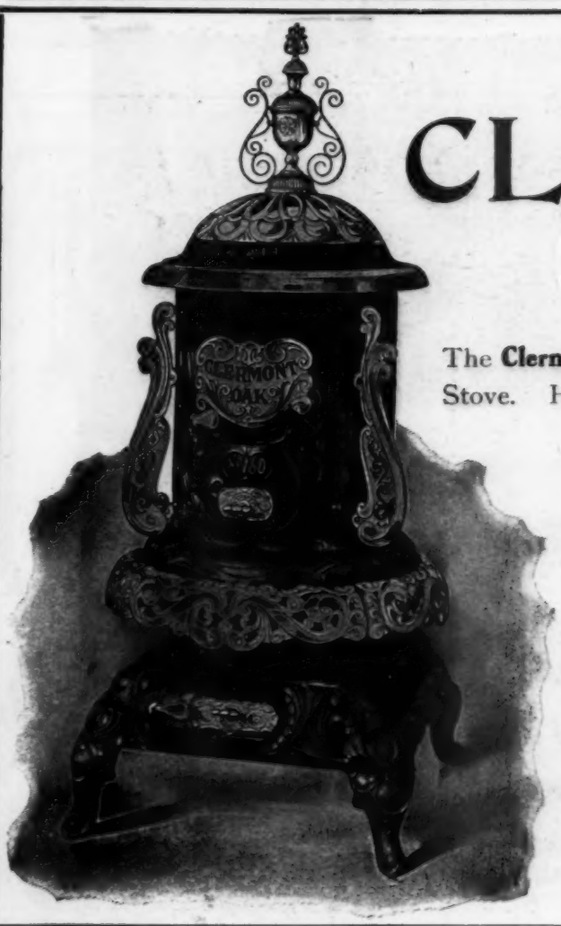
Moore's Stoves Always Please

Time and Temperature—The Clock and the Thermometer—Each is essential to the equipment of a modern kitchen. Both are necessary for best results in baking and the one quite as helpful as the other. MOORE'S RANGES have thermometers which give the most perfect satisfaction. The thousands already sold keep new business coming to

THE EASY LINE TO SELL

JOLIET STOVE WORKS, Joliet, Illinois.

HOLBROOK, MERRILL & STETSON, San Francisco, and Los Angeles. 70



THE CLERMONT OAK

The **Clermont Oak No. 160** series, is an Air Tight Oak Stove. Has an anti-buckling ring, and large feed door. Is a perfect fire keeper. Has nickel registers, handsome nickel bowl ring, nickel top ring, nickel wings on each side of fire door, nickel name-plate, and nickel swing top, and handsome Urn.

It is made in four sizes, Nos. 120, 140, 160 and 180. These stoves are well mounted by experienced mechanics.

Gem City Stove Co.

Dayton, Ohio.

Vapor Stove Manufacturing

is a progressive art. Every year the average merit of these stoves is better than it was the year before and we are proud of the fact that every year

Reliable Vapor Stoves

are better than those of competing makers. Our 1904 Reliables embody every valuable feature in vapor stove construction. They have special features that are possessed by no other stoves, and they will be even better money makers for the dealer than they have been in the past.

"RELIABLE" stoves are constructea according to the safety requirements of the National Board of Underwriters and are on their list of "Permitted Stoves."

Schneider & Trenkamp
Division American Stove Co.
Cleveland, - - - Ohio

VAN'S

Patent Improved Wrought Steel Portable

RANGE

For Hotels, Restaurants, Public Institutions, Boarding Houses, and Private Families.

All Kinds of Hotel Implements for Culinary Purposes.

Manufactured and for Sale by

The John Van Range Co.

419 Elm and 410, 412, 414 and 416 Home Streets.

CINCINNATI - OHIO.

GEM STOVES AND RANGES TOLEDO, O.

"THIRTY DAYS"

is the sentence passed on us by our superintendent when we asked him how soon we would be in a position to show samples and photographs of our

TWO

New Lines of Ranges

These new lines are right in every way and if you don't get the price before taking up your fall business you will wish you had.

Wait and see our advertisement in The American Artisan in May.

Drop us a line and get our catalogue and cuts as we are confident they will interest you.

Toledo Stove & Range Co., TOLEDO, OHIO.

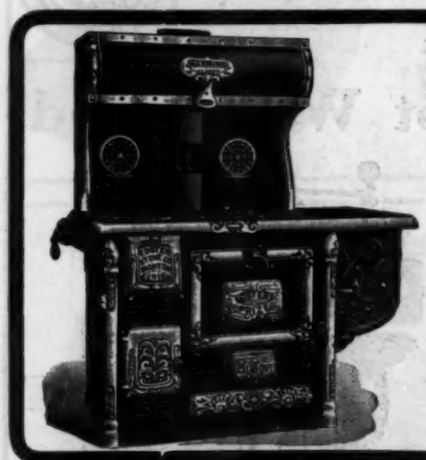
L. C. BURKETT,
Waterloo, Iowa,
writes:

"Please take out our ad. for a tinner in THE AMERICAN ARTISAN.

"We have had numerous replies and have engaged a tinner."

STAR SHOVELS SPADES SCOOPS AND WARRANTED
STAR SHOVEL & RANGE CO. VINCENNES, IND.

Vincennes, - Indiana.



PRIZE STEEL RANGES

Foster

Makes a range that is without a peer. Everything about this new and improved costs no more than ordinary ranges. Order a sample and be convinced. *Send for printed matter.*

The Foster Stove Co.
IRONTON, OHIO

Persistent Advertising

One who watches carefully the pages of general advertising mediums is struck by two things: the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, and apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort.—[*Advertising Experience.*

THE KELSEY WARM AIR GENERATOR

Method of Warming Air is the Very Best Method

In the Kelsey air is warmed by passing in separate currents through from nine to seventeen corrugated cast-iron flues.

These flues form the *fire pot and combustion chamber*, and are in direct contact with, and over the fire and get the benefit of all the heat generated.

This construction gives the Kelsey double the heating surfaces than that of the ordinary furnace, and accounts for the very satisfactory and economical results secured wherever the Kelseys have been used.

24,000 SOLD.

The Kelsey Agency is a Profitable One Some Dealer in Your Town is Sure to get it.

KELSEY HEATING CO.,
Makers, - - - - - Syracuse, N. Y.
New York Office. 156 Fifth Ave.

JAMES SMART MFG. CO., LTD.
Brockville, Ont.,
SOLE MAKERS FOR CANADA.

COOK & VAN EVERA CO.,
38 E. Lake St., Chicago, Ill.
WESTERN SELLING AGENTS.

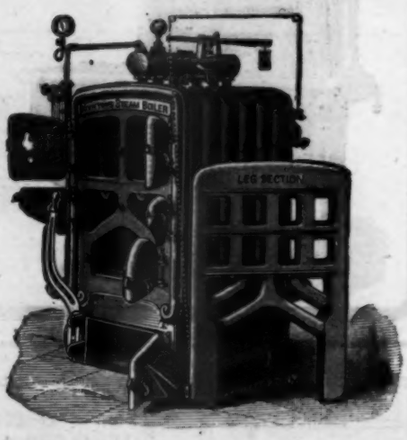
1904

The Old Reliable

MANUFACTURERS OF
UP-TO-DATE HEATERS

Steam, Hot Water and Hot Air

We are making large additions to our works and output capacity, to meet the rapidly increasing demands of our trade.



The **BOYNTON FURNACE COMPANY**

NEW YORK CHICAGO

1904

IT COSTS NOTHING
TO GET

Catalogue and prices of

MUELLER
FURNACES and BOILERS

Write to-day. Get our orders on

Registers (Floor and Wall)

before purchasing elsewhere.

L. J. MUELLER FURNACE CO.

191 REED STREET ESTABLISHED 1857. **MILWAUKEE, WIS.**

Green's Furnaces

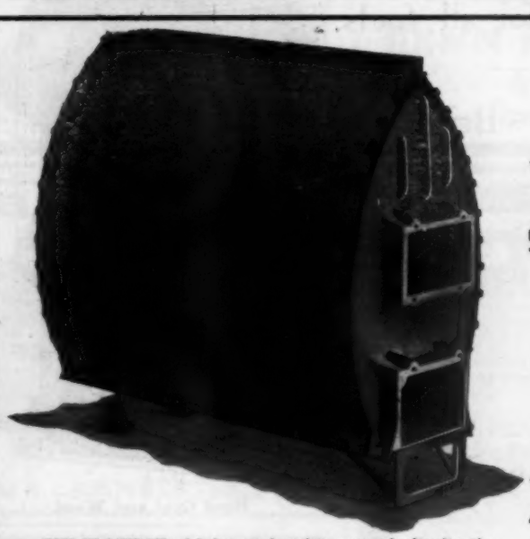
Up to date. **Modern Construction.**

Green's Low Down for Soft Coal.
Green's Crescent for Hard Coal.
Green's Wood Furnace for Wood.
Special Furnaces for all Fuels.

Catalogue tells all about them

Green Foundry and Furnace Works

DES MOINES, IOWA.



THE FLATIRON with doors and casing removed, showing the extended surface and cast iron heads. The heads are fitted into the steel radiating sheets and made absolutely gas and smoke tight by our improved asbestos fiber packed joints.

All Progressive Dealers Should Have

The Flatiron Warm Air Furnace

On Their Floor.

The most powerful Air Heater on the market.
Large radiating surface.
Permanent gas and smoke tight joints.
Diving and return flue principle.
Long smoke travel for products of combustion.
Absolutely self cleaning.

WRITE FOR CATALOGUE. Manufactured by

THE MISKIMEN FURNACE CO.

LOGANSPORT, INDIANA.

TRIUMPH FURNACES WEAR THE CROWN

The Triumph all Cast Furnaces. Five Sizes. Hard or Soft Coal. Portable or Brick Set.

CRAIG-REYNOLDS FOUNDRY CO.
DAYTON, OHIO

JOHN KONTNY
65-67 N. Desplaines St., CHICAGO
WESTERN AGENT

Richardson & Boynton Co's.
"PERFECT"
Trade Mark.
FURNACES

Soft Coal

Adapted for all fuels.

Portable — Brick-set.

First class in every particular.

Large variety to select from—suitable for any market.

Hard Coal and Wood

234 Water St., NEW YORK **84 Lake St., CHICAGO, ILL.**

Height over all, 63 inches

The Stanton Seamless Heater

Is the only heater made that is absolutely proof against leakage of gas from the fire-box into the warm-air pipes, and that will remain so.

Rapidly increasing in favor among progressive dealers. What one of them says:

THE STANTON HEATER CO., Martin's Ferry, Ohio.

Gentlemen: I have had over thirty years' practical experience in warm-air heating, but I most sincerely believe, after handling the Stanton Seamless for five years and installing about 120, with the splendid success I have had, that it is the only furnace that will stand the firing and remain smoke, gas and dust-tight. In keeping up a steady flow of warm-air during the whole night, the Stanton cannot be excelled. I also say that when the Stanton is properly fired it will use less fuel than most any other make of furnace.

GEO. W. HOWELL, 310 W. Third St., Greensburg, Pa.

Write for catalog and secure exclusive territory.

THE STANTON HEATER CO., Martin's Ferry, O.

WEIR

All Steel, Gas and Soot Consuming

FURNACE

Absolutely Gas and Dust Tight.

A Great Heat Producer
A Great Fuel Saver,

THE MEYER FURNACE CO.
PEORIA ILL.

HANDY

FURNACE PIPE

Safest made.
Easiest to put up.
Cheapest made

F. MEYER & BRO. CO.
PEORIA, ILL.

Can you afford

Mr. Dealer, to risk your business reputation by recommending cheap, inferior and unsatisfactory furnaces? Particularly as such a course is entirely unnecessary when you can secure an agency for

Floral City Furnaces

which are made with perfect castings by skilled workmen under careful supervision.

Monroe Foundry & Furnace Co.
Monroe, Mich.

BURTON'S FUEL ECONOMIZER

Attached to a stove pipe saves more fuel and radiates more heat than any other stove pipe attachment

AN EASY SELLER.

Assertions Backed by Guarantee.

The W. J. BURTON CO., Detroit, Mich.

Advertising is the root of all money.

MONCRIEF

WARM AIR FURNACE.

Specialties
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy.
- Cleanliness in Use.

HENRY & SCHEIBLE CO.
6-8-10 Long St. Cleveland, O.

100 Tinners' Patterns

THE AMERICAN ARTISAN FULL SIZE PATTERNS

Comprise patterns for a full line of tinware, in numerous sizes, square and round elbows, cut-offs, etc. These full-size patterns, numbering upward 100, are printed on manilla paper, from which they are readily transferred to heavy sheets and cut out ready for use. The list contains the following patterns:

Tea Steeper
Two-pint Tea Pot
Three-pint Tea Pot
Four-pint Tea Pot
Five-pint Tea Pot
One-quart Coffee Pot
Two-quart Coffee Pot
Three-quart Coffee Pot
Four-quart Coffee Pot
Five-quart Coffee Pot
No. 1 Coffee Boiler.
No. 2 Coffee Boiler
No. 3 Coffee Boiler
Lamp Filler
One-pint Dipper
One-quart Dipper
Two-quart Dipper
Four-quart Flaring Pail
Six-quart Flaring Pail
Eight-quart Flaring Pail
Ten-quart Flaring Pail
Twelve-quart Flaring Pail
Fourteen-quart Flaring Pail
Ten-quart Dish Pan
Twelve-quart Dish Pan
Fourteen-quart Dish Pan
Sixteen-quart Dish Pan
Dinner Bucket
Five-inch T-Joint
Six-inch T-Joint
Eave Trough Mitre Joint
"Snap" 2-inch Conductor Elbow
Cullender
Two-inch Square Elbow
Two-and-a-half-inch Square Elbow
Three-and-a-half-inch Square Elbow
Four-and-a-half-inch Square Elbow
Five-and-a-half-inch Square Elbow
Six-and-a-half-inch Square Elbow
Seven-and-a-half-inch Square Elbow
One-pint Funnel
Two-pint Funnel
Three-pint Funnel
Four-pint Funnel
Small Milk Strainer
Large Milk Strainer
Ten-quart Milk Pail Breast
Fourteen-quart Milk Pail Breast
Two-inch Four-piece Round Elbow
Three-inch Four-Piece Round Elbow
Four-inch Four-Piece Round Elbow
Five-inch Four-Piece Round Elbow
Five-and-a-half-inch Round Elbow
Six-and-a-half-inch Round Elbow
Seven-and-a-half-inch Round Elbow
Small Grocers' Scoop
Medium Grocers' Scoop
Large Grocers' Scoop
Apple Corer
Oval Foot Bath
Oval Pudding Pan
Half-gallon Can Breast
One-gallon Can Breast
Two-gallon Can Breast
Three-gallon Can Breast
Half-pint Measure
One-pint Measure
One-quart Measure
Half-gallon Measure
One-pint Basin
Two-pint Basin
Three-pint Basin
Four-pint Pan
Six-quart Pan
Ten-quart Pan
Small Cake Pan
Medium Cake Pan
Large Cake Pan
Small Wash Basin
Large Wash Basin
Sprinkler Breast
Four-gallon Churn
Five-gallon Churn
Small Dust Pan
Large Dust Pan
Five Sizes Funnel Patterns
Oval Dinner Bucket
Rain Water Cut-off
No. 7 Boiler Cover
No. 8 Boiler Cover
No. 9 Boiler Cover
No. 7 Boiler Bottoms
No. 8 Boiler Bottoms
No. 9 Boiler Bottoms

THE AMERICAN ARTISAN **full size patterns are a great convenience, and in no other way can they be obtained at so small a cost. Price, sent postpaid for the**

FULL SET OF 100 PATTERNS $1.00.

DANIEL STERN, **69 Dearborn Street, CHICAGO, ILL.**

COMBINATION WARM AIR AND HOT WATER HEATER.

GILT EDGE FURNACES

GILT EDGE in construction.
GILT EDGE in up-to-dateness.
GILT EDGE in durability.
GILT EDGE in economizing fuel.
GILT EDGE in ease of operation.
GILT EDGE as money makers for the dealer.

SEND FOR CATALOGUE

R. J. SCHWAB & SONS CO.
MILWAUKEE, WIS.

HERO FURNACES ARE THE BEST FOR A COLD CLIMATE

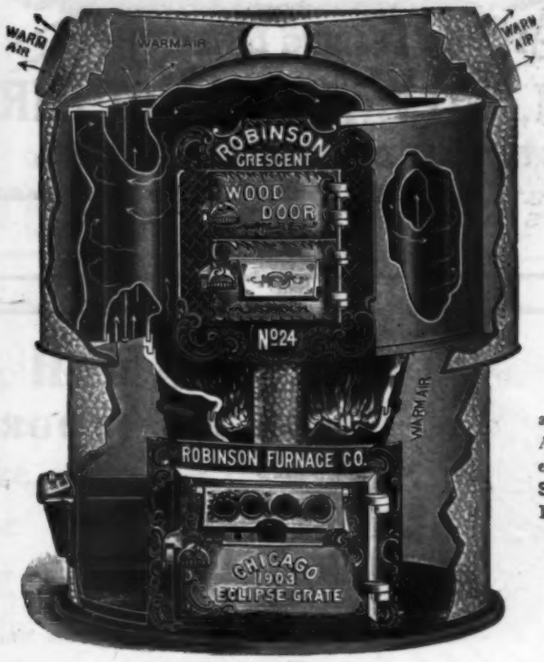
WRITE FOR CATALOG

CHAS. SMITH CO., : 101 Lake St., Chicago, Ill.

HEAT LIGHT
FOR THE
HOME
STORE
HOTEL
SCHOOL
CHURCH
OFFICE
COLLEGE
THEATRE
FACTORY
VILLAGE
INFORMATION FREE
SEND FOR IT.
DETROIT HEATING AND LIGHTING CO.
DETROIT MICH.

J. J. SUCHANEK, Preston, Minn., writes: "The American Artisan is one of the best papers of its kind that I know of, and I expect it every week as I would a letter from a lady friend."

Robinson Crescent Furnace



Sectional View.

FOR
Hard Coal
Soft Coal
or Wood

A Good Furnace at a Medium Price.
A Good Quick Heater for Coal or Wood.
Sectional Fire Pots.
Double Feed Doors.

WRITE FOR CATALOGUE

ROBINSON FURNACE CO., 105 Lake St. CHICAGO

Emperor Furnaces
FOR WOOD.

Simple, Safe, Durable. Economical in Fuel.

The Best and Cheapest Line of Wood Furnaces . . .
Furnished for either Brick or Galvanized Iron Casing.

SEND FOR CATALOGUE.

Bergstrom Bros. Co.

NEENAH, WIS.

FURNACES.
PIPE ELBOWS REGISTERS & SUPPLIES

Write For Catalog.

Chicago Furnace Supply Co., Chicago.

Royal Heaters.
MANUFACTURED BY THE

HART & CROUSE CO.
UTICA, N.Y.

ALL THE LEADING LINES OF

STEAM, HOT WATER & HOT AIR,

FOR HEATING ALL CLASSES OF BUILDING.

235 WATER ST. N.Y. COLUMBUS, O. BRANCHES. 29 LAKE ST. CHICAGO. ST. LOUIS.

Overton Adjustable Stovepipe

Requires no cutting; can be adjusted instantly to any desired length; enables anyone to set up a stove without difficulty; is simple; is effective; is inexpensive; is non-collapsible; is indestructible; saves time, saves labor; saves money, and saves patience and temper. **Dunlap Mfg. Co., Dunlap, Ia.**

WARMTH
ON THE FLOOR

The only Floor Warm Register manufactured.

C. H. FOSTER
3403 Bell Ave., St. Louis, Mo.

MAKER LARGEST LINE OF WALL REGISTERS

"It is true that advertising will not put merit into poor merchandise, but good merchandise often becomes poor for the want of good advertising."

—Some Essential Oils for Advertising.

DON'T FOR THE PAY
BLACK KID
STOVE POLISH
IF NOT THE BEST YOU EVER USED
PUT UP IN 5-lb. CANS
NICKEL PLATE STOVE POLISH CO.
MANUFACTURERS, CHICAGO
PRICE, 65c PER CAN

See Our Cats.

Floor Registers
Side Wall Registers
Stove Pipe Registers

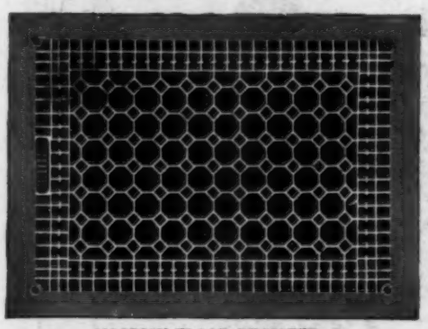
Ash Pit Doors
Cylinder Rings
& Furnace Goods

See Cat. No. 2

No. 1 Hardware
No. 2 Registers
No. 3 Hay Tools
No. 4 Wire Workers' Goods
No. 5 Door Hangers
No. 6 Malleables

STOWELL MFG. & FDY. CO.
SO. MILWAUKEE, WIS.

"REGISTERS OF QUALITY"



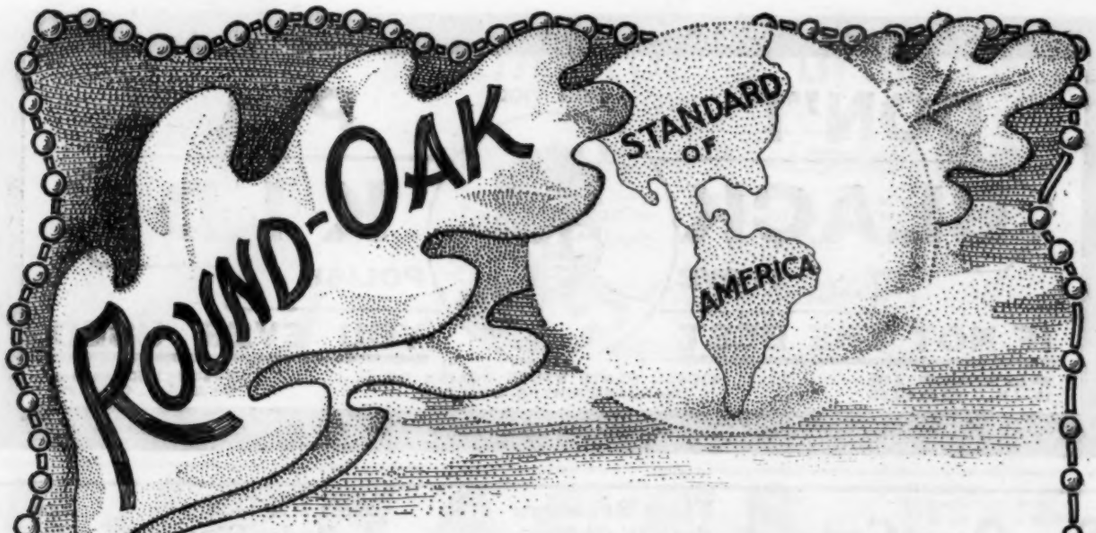
MOORISH FLOOR REGISTER.

THE FERROSTEEL COMPANY,
CLEVELAND, OHIO
Offer two lines for 1904.

1. *The time tried and reliable line of Ferrosteel goods noted for accurate mechanism and perfect finish.*
2. *Our new Modified Steel Register combining an absolutely rigid top with an invulnerable bottom.*

Genuine Moorish or Plain Lattice Tops furnished with either line. All our goods are labeled. None others are genuine. Catalogues, prices and Special Circular illustrating our SIDE WALL REGISTERS on application.

WHEN a logger places a wedge in a log and hits it a blow he does not know how much of a split the effort will make, but he does know that if he continues to hit the wedge the log will soon lie in twain. The driving wedge to business is advertising. You cannot expect to make your success with a single ad, no matter how large. Continual rapping does it.



You have all heard of and perhaps had experience with the man, the cost of whose new home ran over the appropriation in the usual and same old way, before he had it three-fourths completed, and who promptly tried to even the whole thing up on the furnace, and you know, or can imagine, when all was finished where he landed.
Still folks wonder why so many people kick about their furnaces and why they "let out school" when a little extra-cold weather comes along. Just so long as PRICE, instead of QUALITY, is the only argument, just so long will there be unsatisfactory furnace jobs. Better furnaces, better furnace work and PLANNING are demanded.
We have a cheerful willingness to try to show how to meet this demand. It may work with your customers and it may not. It costs nothing to find out.
At least we have the furnace of quality.
Nobody contradicts that.
Have you seen our furnace book, Warmth and Comfort?

ESTATE OF

P. D. Beckwith

FRED E. LEE, Manager

Dowagiac Mich.

Makers of Good Goods Only

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS, AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00. Address all Letters, communications and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, APRIL 30, 1904.

THE Northwest Implement Trade makes a touching plea for the long suffering commercial tourist, urging dealers to give him a kind word and a pleasant smile. It thusly depicts the traveler's woes:

"He is awakened in the middle of the night, carries a heavy grip a mile or more to the station, waits two hours for a delayed train in juxtaposition to a depot stove that does not obey the call of duty, finds the coach seats all occupied, dozes for hours on the sharp edge of a sample case and is, upon arrival at his destination, bundled off in a 'bus that Providence never intended should carry human freight."

BARON KENTARO KANEKO, ex-minister of agriculture in the Japanese cabinet, has written for the New York Times an article entitled "Why the United States Will Secure the Commercial Supremacy of the World." In the course of it, he says:

"I found that the markets of Manchuria, which had been almost entirely controlled by England for many years, had been invaded so successfully by American firms that the British consul at Shanghai had just reported to his government: 'America has become such a formidable competitor in Manchuria that she is driving out our trade.'"

PRICES of nearly all the great classes of domestic production have materially fallen during the past year, the chief exceptions being cotton, wool, wheat, corn, oats and refined petroleum. On the other hand, prices of imported articles for use in manufacturing have advanced during the same period.

Pig iron shows a fall from $23.10 per ton in March, 1903, to $14.35 in March, 1904; southern pig iron, from $21 per ton in March, 1903, to $9.75 in March, 1904; iron bars, from 2 cents per pound in March, 1903, to 1½ cents in March, 1904; steel bars, from 1.6 cents per pound in March, 1903, to 1.4½ cents in March, 1904; steel billets, from $32.50 per ton in March, 1903, to $23 in March, 1904; tin plate, from $4 per box of 100 pounds in March, 1903, to $3.65 per box in March, 1904; leather (oak, middle weight), from 38 cents per pound in March, 1903, to 35 cents in March, 1904; while steel rails, as already indicated, show no change. Metals used in manufacturing show in most cases a slight decrease—copper, from 15 cents per pound in March, 1903, to 12.87½ cents in March, 1904; lead, from 4.67½ cents in March, 1903, to 4.62½ cents in March, 1904; zinc, from 5.7 cents in March, 1903, to 5.12½ cents in March, 1904.

THE expenditures of the United States government are much less in proportion to population than those of many other of the leading nations of the world. This fact is shown by a statement just published by the Department of Commerce and Labor, through its Bureau of Statistics, showing the population, revenues, expenditures and indebtedness of the principal countries of the world. It shows that while the expenditure of the United States, with 80 millions of people, is 640 million dollars, that of the United Kingdom, with 42 millions of people, is 898 million dollars; that of France, with 39 million people, is 693 million dollars; that of Germany, with 58 million people, 553 million dollars; while in practically every country aside from China and India, with their enormous population, the per capita of government expenditures is greater than in the United States.

Carrier's Right to Act as Agents Is Lost.

AN agreement was reached on April 25th by the conferees having charge of the postal appropriation bill containing a provision relating to the privileges of carrying merchandise and newspapers now enjoyed by rural free delivery carriers. The senate conferees receded from their position and accepted the house propositoin. This agreement, of course, will be ratified by both houses, and as it becomes a law it will prevent the carriers handling newspapers or acting as agents for business houses, but they may carry merchandise at the request of patrons living along their routes. This provision, as it will be placed upon the statute books, is as follows:

"On and after July 1, 1904, letter carriers of the rural free delivery service shall receive a salary not exceeding $720 per annum and no other or further allowance or salary shall be made to said carriers.

"On and after said date said carriers shall not solicit business or receive orders of any kind for any person, firm, or corporation, and shall not during their hours of employment carry any merchandise for hire.

"That said carriers may carry merchandise for hire for and upon request of patrons residing upon their respective routes whenever the same shall not interfere with the proper discharge of their official duties and under such regulations as the postmaster general may prescribe."

A proviso is added to the paragraph authorizing the postmaster general to establish in his discretion underground service in Chicago, money saved by the electric service to be made available for part of the cost of establishing that service.

This new enactment is a body blow to the various schemers who tried to debauch government employes into becoming mail order hucksters on the side, or to speak more correctly, to bring about a state of affairs in which the distributers of mail order goods would become government employes on the side.

Journals circulating among rural free delivery carriers and dependent on alluring advertisements of side lines and mail order houses will, like Othello, find their occupation gone. The legitimate local merchant will now find that the rural free delivery service is conducted on a more equitable basis and if he scents connivance between these carriers and the Chicago catalogue houses after July 1st next, it is his own fault if he does not call a halt in the matter.

The Edge Tool Pool.

THE merging of Morgan gave us the United States Steel Corporation and the pooling of Parks gave us the wire nail combine of 1896. The former's companies can be likened to a chronic condition of "trustitis," while the latter's schemes are acute attacks. The Morganized mergers have not proven themselves to be the wicked creatures it was prophesied they would be but the Parksite pools are both nasty and naughty.

John H. Parks of Boston is "commissioner" for this pool that has gathered into its folds practically all of the manufacturers of axes, hatchets and edge tools in the United States. This pool already has resulted in an advance of about 25 per cent in the price of axes and hatchets since January 1 and of 30 to 40 per cent in edge tools. It contemplates even larger advances, effective July 1 and October 1.

While all of the details of the pooling arrangement are not accessible, it is known that the various distributers buying from manufacturers are divided into four classes. Of Class A there are only three jobbers in Chicago. Class B pays 50 cents per dozen more, and is understood to take in the smaller distributers and the mail order firms. Classes C and D apply to interior jobbers, according to location.

A trust which intends to remain in business indefinitely does not run prices up to the highest possible point, because that would soon beget dangerous competition. The transitory, short lived trust, which merely intends to make a hurried raid on the consumers, runs up prices remorselesly, gathers in all the money it can, and then dissolves.

The wire nail men got together and made a raid on consumers, and the name and fame of Cent-a-keg Parks was bruited over the land. They had an agreement with the manufacturers of nail making machines to sell them to nobody outside of their circle. With the aid of that agreement they controlled the market absolutely for about two years. When they saw competition near at hand they suddenly dropped prices and divided profits.

How shall ephemeral but harmful combinations of this kind be dealt with? The usual slow processes of the law are of no avail. The organizers of the combine will dissolve it of their own motion when they are no longer able to corner the market, and there will be nothing for the courts to pass on by the time that they are ready to act. There is need of some agency which shall have power to intervene effectively as soon as it is discovered that a combine of manufacturers has begun its cornering operations.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

THE place of Harvard in American literature is now assured. All Harvardites will swell with self-conscious joy when they learn that I have accepted a Harvard poem for my marvelous collection of hardware and stove poetry. Hunt, Helm, Ferris & Co. are the poets who have brought fame to fair Harvard, thirstiest town along the Badger border—thirstiest for fame, I mean, of course. May her iambs be immortal! May longevity attend her lyrics! May the scythe of time spare her trochees!

While "Jingle Bells" and some effusions of Riley have glorified the sleigh ride, the world has waited for the poet of the steel sled loaded with boy—common boy, whirling over the hill side in joyous exhilarating abandon.

This poet has come. He is, as country journalism, barbarously phrases it, in our midst. His poem is as follows:

"Of all the sleds that ever slid
Along the slippery ground,
The Star steel sled outslides them all,
And leaves them at a bound.

"It makes no difference what the load
You place upon its back,
'Tis strong of limb, 'twill lightly skim
Along the shining track.

"In beauty 'tis by none excelled,
For style it has no peer,
It could dispense with half its charms
And then no rival fear.

"The Star Steel Sled surpasses all
For beauty, strength, and speed,
And he who sees it, these three claims
Will readily concede."

* * *

THE old man in the parable killed the fatted calf on the prodigal's return, and the twentieth century retailer who sends goods back on the slightest provocation is lucky that he is far away from the wholesaling center, because the jobbers in their joy at the shipment's return might mistake the retailer that was responsible for the fatted calf. I never knew a faultless hardware jobbers—perfect men all go into art criticism, ostrich farming or the manufacture of foundry supplies. I have known large hardware jobbers whose trade ran pretty near all over the world, and little runty concerns who styled themselves jobbers but who could hardly pass muster as retailers, and all of them have made mistakes in their credit department, packing department, shipping department and buying department. The main guy and the newest office boy have lapsed not once, but several times, into commercial imbecility.

Everything considered, the employe or the boss of a hardware jobbing business is way above the average when it comes to painstaking fulfilling of orders. If the salesman and the retailer were as careful when it came to making out orders as the men at the other end of the line were in deciphering their heiroglyphics there would not be a quarter of the mistakes made there are to-day.

The dealer who orders ¼ gross and gets only 33 or else ½ gross; or who orders size 8-20 and gets 9-20, or who orders the Three Queens brand and gets

the Aces-up brand, or who wants a dozen coffee pots and gets a dozen coffee biggins, or who gets nickel-plated instead of bronze-plated goods; to all of these I say, "Peace be unto you, brethren, for your kick is righteous."

The jobber who is so thin-skinned that he squirms because an order is wrongly filled is but a square peg in a round hole—him to a hennery, where he can raise Plymouth Rocks and Cochin Chinas and the woes of retailers will not cause him nocturnal wakefulness.

There's a limit in the game, however. Some retailers of small scruples return goods that don't look the same as they were pictured in the honeyed patois of the salesman, who had been informed by the last mail that the house wanted orders, and also that there were others to whom his salary and expense account might prove acceptable. I know jobbers who believe some retailers return goods out of pure Satanism, while others do it out of habit and others think it is a holy joy—and a few, after making fools of themselves by taking back goods from customers on the silliest pretexts, think it is time to get their backbone up and tan a few square feet of the jobber's hide.

Some jobbers may like this. I know one firm that don't, as they recently wrote me as follows:

"We have been reminded, during the past ten days, in a number of instances, that human nature seems to be supplied with a magazine folly attachment, and provided with a hair trigger—in many cases the direction of the deadly charge being reversed so that the unsuspecting and deceived operator who "didn't know it was loaded" gets the full benefit of the shattering results.

"We refer particularly to a class of retailers who make it a practice, and seem to take much pleasure out of it, of returning goods on the slightest provocation, transportation charges collect, to the jobber, who many times is obliging to the point of foolishness to do his customers the various favors they ask.

"It might be that a little preachment from you would result in showing quite a number of misguided mortals the 'straight and narrow way.' The jobber is, also, human, and when he has been sufficiently annoyed, harassed and bled by such methods he is apt to get back at his unreasoning customers in the only way left open to him—that of tacking on to the price, on the lines on which he knows his customer cannot keep posted.

"If the retail trade do not, some day, stop getting worse and begin to get better in these respects, they may see a change in some of the rules and regulations which the jobbers adopt for their guidance, which the retail trade will consider rather drastic and irksome."

These jobbers have a raw spot on the returned goods subject, and every time a dealer tries a little pleasantry in chasing the expressman with his package from his door he flecks this aforesaid tender place with a rawhide whip.

This is cruelty to animals, but, more than that, how do you know, Mr. Retailer, that this jobber who wrote to me and whose letter I published anonymously, isn't your jobber? If you get him "riled" by too many returned goods jokes he may try to be a funny man himself and get an extra 5 per cent out of you when you order 28-inch bolts or something else a little out of the usual.

The right thing for the dealer to do is to keep carbons of all orders. When the jobber delivers the goods he should pay him and take his medicine, even if changes in trade conditions make the goods less desirable. If the goods are not what the dealer ordered, he should send them back with an explanation so clear that there would be no unnecessary and oftentimes irritating correspondence in straightening the matter out.

* * *

No one seems to be particularly anxious to secure money these days, as the vaults of the New York banks are filled to overflowing with idle deposits, and money is constantly coming in rather than flowing out at that. On April 23 last two New York banks reported deposits of nearly $350,000,000, making individual records. Several ingenious explanations are offered for this state of affairs.

One of these is undoubtedly the enormous acretion of gold gained during the past seven years, almost all of which is in circulation in the United States, either directly or indirectly, representing for the most part the output of the mines, and to some extent importations of gold that have liquidated our trade balances. We have never cut very deeply into the unprecedented importation of gold in 199, when nearly $100,000,000 came from Europe in liquidation of Europe's debt to us. We have been taking out of mines since 1897 on an average of about $80,000,000 a year in gold, and much the larger part of this has gone into circulation. For, unlike our cousins in London, we turn our freshly mined gold almost immediately into coin or gold bars. In London gold is received as a commodity and is sold as bullion in the open market and coined at the Bank of England's leisure. Here it invariably finds its way instantly to the mint, and the fortunate miners receive in exchange for it the much-coveted gold certificates, which are instantly converted into cash.

* * *

Exports of manufactures from the United States seems likely to make their highest record in the fiscal year which ends with the month of June, 1904. In the eight months ending with February, for which the Department of Commerce and Labor, through its Bureau of Statistics, announces the figures of exports of manufactures, the total is 20 million dollars larger than in the corresponding eight months of the fiscal year 1900, which was the record year in exports of manufactures. For the eight months ending with February, 1904, the total exportation of manufactures was $288,400,924, against $268,537,972 in the corresponding months of 1900.

* * *

An amusing illustration of the blundering of lawmakers comes from Oregon and was unearthed during the *habeas corpus* proceedings in the case of H. Claussenius, Jr., a plumber, who had been fined for a violation of the state law, a section of which reads:

"Any person who works at the business of plumbing, or maintains or conducts a plumbing shop, in any incorporated city or town in this state containing more than 4,000 inhabitants, or otherwise violates any of the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof in a justice court shall be punished by a fine of not less than $10 or more than $100."

This statute law of a sovereign state plainly states that it is a misdemeanor to run a plumbing business. It is, of course unconstitutional.

News Siftings

The stove foundry of C. Emrich, Columbus, O., was damaged by recent fire to the extent of $1,000.

Horace Mitchell is president of the Uniform Iron & Steel Co., Kittery, Me., capitalized at $5,000.

It is said that the Standard Stove Works, Ft. Payne, Ala., contemplate removing their plant to Columbus, Miss.

It is said that a new foundry for the manufacture of steel ranges and heating stoves will shortly be established at Waterloo, Ia.

Emil W. Neu, Joseph A. Weber, John M. Marshall, David R. Edwards and Robert Georgi are the incorporators of the Homestead Heater & Mfg. Co., Homestead, Pa., capitalized at $50,000.

The M. Hertenstein Co. have been incorporated by M. Hertenstein, C. Hertenstein, Theo. Aust, Jr., C. D. Aust and M. Hertenstein for the manufacture of iron and sheet steel cooking stoves, ranges and heaters. This firm have been well known in the stove world for a number of years.

The Gem City Stove Co. of Dayton, Ohio, are placing upon the market a new hot blast oak stove which contains some features of merit never before embodied in any stove construction. The stove is a handsome design, well pleasing proportion and is sure to prove a great seller.

We are indebted to C. A. Wooley of the Cole Mfg. Co., Chicago, and J. B. Wilson, representing the Cribben & Sexton Co., Chicago, for a photograph showing a dozen of the stove salesmen in attendance at the meeting of the Illinois Retail Hardware Dealers' Association held at East St. Louis recently.

L. L. Applegate is interested in a Cincinnati, O., concern, capitalized at $250,000 for the manufacture of briquettes from slack and powdered coal. This company will erect an extensive plant in that city and have engaged the inventor of the briquetting process, viz., Watson Allen of Seattle, Wash., to superintend their work. Mr. Allen claims that the number of heat units in the coal manufactured by this process is increased 20 per cent, and at the same time that the cost to consumers will be greatly reduced over the prevailing prices of coal.

The trade will learn with regret of the death of Thomas J. Duffy, which took place April 28th at 4 p. m. from Bright's disease, at his residence, 3250 Rhodes avenue, Chicago. Mr. Duffy was a veteran stove man, having been with Perry & Co. from 1875 to 1877 and having also traveled for Cribben & Sexton Co. for seven years, and Burdett, Smith & Co. for eight years. He was a member of the Minnesota senate from 1862 to 1864, and a resident of Shakopee, that state, from 1855 to 1869. Mr. Duffy was the father of T. J. Duffy, Jr., representative of the Germer Stove Co., Erie, Pa., in Minnesota, North and South Dakota, and of Frances J., Frank and Mary Duffy.

Wm. Resor & Co. of Cincinnati will be in the market this season with a new and up-to-date lot of stoves and ranges. They have a desirable line of steel ranges which are new designs and of pleasing appearance. Their air tight stove, though it has met with very great success is having its dress changed and improved. They have a new hot blast and high grade oak stove. Their base burner will retain its constructive features as before, but will appear in a brand new and pleasing dress. They are manufacturing quite a large variety of gas ranges and have rebuilt and improved their entire lines of stoves and ranges for the season's business. The trade of this firm has been considerably increased since John A. Schulte injected his aggressive ideas into its management.

The Pittsburgh Stove & Range Co., Pittsburgh, Pa., are just beginning the erection of an addition to the manufacturing department of their plant, which is known as Division A. When completed it will give them 22,000 additional feet of floor space. They advise us that the property they recently sold was the Crea-Graham plant and not the Baldwin & Graham plant. The latter plant is located at New Castle, Pa., and is running to its full capacity filling orders. It is now styled Division B. This firm further advise us that their furnace business is one of their most active departments, and that last year when the rush came their capacity in this direction was more than absorbed. They are now preparing for the most active eastern furnace trade they have ever experienced.

STEEL LEADER RANGES.

The Lattimer-Williams Co., Columbus, O., are making a full line of steel ranges. They are enjoying large sales on some and are using the latest presses and power machinery for making these goods.

Their Steel Leader ranges are this year's latest model and embody every feature that makes a successful, satisfactory steel range. Their quality, beauty, perfect operation and price all commend them to the trade. All parts coming in contact with heat are thoroughly protected with cast iron plates and asbestos. The body is heavy polished blue steel and well riveted. Interlined with asbestos. The oven is extra heavy and securely braced all around to prevent buckling or warping. The oven door is evenly balanced and when open forms a large smooth shelf. The spring is outside and not affected by heat. The fire box is perfectly adapted for burning hard or soft coal or wood. The duplex style grates may be removed from fire box without disturbing side linings or grate rest. It is provided with four-inch extension end for burning wood. The linings are all ribbed and of extra weight. The flues are four inches high. The back flue is all cast iron and is rust proof and air tight. The ash pit admits of big ash pan. There is an ash guard to protect floor when pan is being removed and screw draft in ash pit door. The end feed door is large and opens down affording a clean and a convenient feed. The pouch feed door is full length and generous. It has four-inch feed. The lower draft door is placed so that the air admitted will pass through the fire and give ample draft. The tops are made in four pieces with three key plates and heavy ring lids, centers, and supports. They will not crack or warp. The reservoir is white enameled, with cast iron casing, and drip cup

under reservoir preventing condensation from streaking body. The high closet is twelve inches wide with roll top fronts, and fancy cast iron side brackets. A direct damper is operated with plunger on outside of range. The reservoir damper is 8x16 inches and of the deflector pattern. The draft is always under control.

It is made in two styles—"A" and "B."

Style "A" is furnished with handsomely carved base that adds much to the appearance of the range, strengthens the body, and is not in the way of operator. The nickel is particularly elaborate—the ash door, end feed door, oven door, reservoir panel and edges all being plated.

Style "B" is of same construction and quality as style "A," but nickel is not so elaborate, and base at bottom is omitted.

ENJOYS A LARGE BUSINESS.

John Kontny, the stove specialist and heating expert, 65-67 North Desplaines St., Chicago, is enjoying a phenomenal business. His large warehouses, one of which is 100x100 feet in dimensions, 6 stories and basement high, give him what are probably the finest storage facilities of any house catering to the western trade, and as a necessary corollary of this, he probably has the finest shipping facilities of any western stove house. His motto, "No order too large for immediate shipment, and no order too small for prompt attention," is rigidly lived up to, as many hundreds of western dealers can testify from personal experience. Mr. Kontny invites the trade to secure his prices on cast cooks and ranges, steel cooks and ranges, malleable ranges, base burners, oaks, hot blasts, warm air and combination furnaces and steam and hot water heaters.

MICA.

In a recent report of the United States Geological Survey statistics are given in regard to mica. The total amount of mica produced in the United States in 1902 was valued at $118,849, the production of plate mica being 373,266 pounds and valued at $83,843, scrap mica 1,028 short tons, valued at $13,000 and rough mica, as mined, 372 short tons, valued at $21,925. The increase in the production of plate mica during the last three years is due to the increasing quantity of small sized mica disks and rectangular sheets that have been cut for electrical purposes.

The total value of the imports in 1902 is estimated at $131,278, which exceeds the value of the home product by some $13,000.

While the mining of mica in the United States never has assumed the proportions of a large industry, there are many sections of the country where the product is found. Mining operations undertaken with a view to its recovery are scant and work in many of the properties is carried on in a desultory fashion. Actual mining of mica has been limited during the past few years to North Carolina, New Hampshire, South Dakota, New Mexico, Idaho, Virginia and Colorado. Some development work was undertaken last year in California, Nevada, Maine, Alabama and Georgia.

Probably not more than 10 per cent of the mica mined in the United States is capable of being cut into such plates, most of the product being known as waste or scrap mica. The commercial value of scrap mica varies at from $10 to $8 per ton delivered at the railroad, plate mica selling at 30 cents a pound for two by four inch specimens, up to $3.00 a pound for six by six inch specimens.

CENTURY MAIL BOX.

The Century Post Co., Tecumseh, Mich., are manufacturers of the Century rural free delivery mail box shown in the accompanying illustration.

The Century Mail Box.

The Century is made from No. 22 galvanized sheet steel, 8x7x18 inches, has heavy cast iron heads (galvanized) firmly riveted and soldered to the bodies, and is fastened to the post with strong extension brackets, making it most accessible and easiest for the carrier to operate, as it is the only box made that sits 15 inches from the post, it is claimed. It weighs 14 pounds complete. This box will last a life time and is an ornament to any farm. Snow and rain cannot drive in under covers of these boxes, as they have storm guards.

THE BRIGHTON & BREAKFAST BELL RANGES AND HOT BLAST.

The John A. Schulte Co., Cincinnati, O., send us one of their latest catalogues showing a complete line of steel ranges, cast ranges and hot blasts.

The Breakfast Bell steel ranges are made of the highest grade of steel. They are asbestos lined throughout. A cast plate is securely anchored under oven to prevent warping. Some of the other features are ventilated oven, reversible duplex grate, top cut in four sections, grate easily removable, extended fire box for wood on all ranges, flush top, encased cast iron enameled reservoir, handsome nickeled band on front top, nickeled ornamental name plate on oven door, nickeled fire door, ash pit door and soot door, and nickeled tea pot shelves. These ranges are suitable for coal and wood.

The Brighton steel range is well made and full asbestos lined.

The Breakfast Bell cast range is made in a new and pleasing design. The oven is full. The feed door is enlarged and is placed in such a position that it forms a perfect chute for coal. The ash pan is very large. The damper is operated by a lever. These ranges are fully nickeled.

The Brighton Oak Hot Blast is fitted with hot blast patent, which places the fire completely under control, increasing or diminishing same to required temperature by simply turning a screw register in the feed door. One of these catalogues will be forwarded the trade on application. When writing for same, kindly add, "Saw it in THE AMERICAN ARTISAN."

The Hardware Record.

American Hardware Mnfs. Assn.
Pres., J. C. Birge, St. Louis, Mo.
Vice-Pres., F. S. Kretsinger, Ft. Madison, Ia; Harry B. Lupton, Pittsburgh, Pa.; Geo. W. Corbin, New Britain, Conn.
Secy.-Treas., F. D. Mitchell, Phila.
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Arkansas Retail Hdw. Dealers' Assn
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1st V.-P., H. Williams, Hot Springs.
2d V.-P., A. L. Skillern, Nashville.
S.-T., C. E. Taylor, Little Rock.
Ex. Com., C. T. Rosenthal, Batesville; T. B. Stewart, Newport; E. E. Mitchell, Morrillton; W. M. Graham, Clarendon; R. F. Roys, Russellville.

Chicago Retail Hdw. Dealers' Assn.
Pres., H. E. Gnadt.
V.-P., G. A. Neeb.
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Hardware Merchants' and Manufacturers' Assn. of Philadelphia.
Pres., Thomas Devlin.
V.-P., John R. Griffith.
S.-Treas., T. James Fernley.
Directors, W. W. Supplee, John R. Griffith, E. S. Jackson, W. C. Peters, S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

Indiana Retail Hdw. Dealers' Assn.
Pres., E. M. Bush, Evansville.
1st. V.-P., A. Shidler, So. Bend.
2d V.-P., T. J. Lindley, Jeffersonv'l
Sec.-Treas., M. L. Corey, Argos.
Members Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland.

Illinois Retail Hdw. Dealers' Assn.
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V.-P., W. T. Gormley, Chicago.
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Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Charles H. Williams, Streator; W. T. Gormley, Chicago, L. Nish, Elgin; Geo. A. Engelhardt, Chicago; Frank McKinney, Rockford; Chas. Johnson, Peoria; L. D. Ray, Belvidere; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia.

Indian Territory Retail Hdw. Assn.
Pres., J. G. Smith, Canadian.
1st V.-P., Fred Parkinson, Wagoner.
2nd V.-P., E. C. Stretch, Vinita.

Iowa Retail Hdw. Dealers' Assn.
Pres., S. R. Miles, Mason City.
V.-P., H. S. Vincent, Ft. Dodge.
Treas., A. C. Vieth, Oakland.
Members Ex. Com., T. A. Nichols, Burlington; D. A. Stauffer, Iowa City; W. B. Baumgardner, Dubuque; U. S. Johnson, Tama; F. W. Ritter, Hedrick; Thomas Gadd, Des Moines; F. F. Botlinger, Afton; Chas. Swaine, Council Bluffs; Wm. H. Millard, Cherokee.

Kansas Hardware Dealers' Assn.
Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kiniry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J. O'Neill, Osage City.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., J. C. Frederick, Owensboro.
1st V.-P., J. C. Mahon, Lawrenceburg.
Sec., John R. Sower, Frankfort.
Treas., J. Steitler, Owensboro.

Michigan Hardware Association.
Pres., John Popp, Saginaw.
V.-Pres., F. M. Brockett, Battle Creek.
Treas., Henry C. Weber, Detroit.
Sec., A. J. Scott, Marine City.
Ex-Com., W. P. Culver, Portland; K. S. Judson, Grand Rapids; J. H. Whitney, Merrill; E. J. Morgan, Cadillac; T. Frank Ireland, Belding; Fred S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marine City.

Minnesota Retail Hardware Assn.
Pres., A. T. Stebbins, Rochester.
V.-P., George Evenson, St. Peter.
Sec., M. S. Matthews, Minneapolis.
Treas., Geo. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Suer; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; J. A. Roehl, Owatonna; W. T. Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester; Geo. M. Evanson, St. Peter.

Missouri Retail Stove and Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., E. L. Wachter, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrollton; F. N. Kannsteiner, St. Louis; W. T. Shoop, Richmond.

National Hardware Association.
Pres., S. A. Bigelow, Boston.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Ex. Com., F. Barker, Elmira, N. Y.; J. D. Moore, Birmingham, Ala.; John Freeman, Detroit; P. E. Strouss, Boston; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. A. Kirk, St. Paul.

Nebraska Retail Hdw. Dealers' Asn.
Pres. J. C. Cornell, Ord.
Vice-Pres., F. D. Kees, Beatrice.
2d V.-P., Max Uhlig, Holdrege.
Sec.-Treas., H. J. Hall, Lincoln.

National Retail Hdw. Dealers' Asn.
Pres. W. P. Bogardus, Mt. Vernon, O.
V.-P., W. H. Tomlinson, LeSuer, Minn.
2d V.-P., F. C. Moys, Boulder, Col.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; James N. Kline, Williamsport, Pa.; Frank F. Porter, Chicago; S. E. Jones, Richmond, Ind.; A. H. Abbe, New Britain, Conn.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. F. Emery, Fargo.
1st V.-P., G. W. Wolbert, Bismarck.
2d V.-P., A. C. McNiven, Langdon.
3d V.-P., J. B. Boyd, Rugby.
Sec., C. N. Barnes, Gand Forks.
Treas., H. T. Helgesen, Milton.
Ex. Com., E. E. Elliott, Sanborn; H. F. Strehlow, Casselton; Hurbert Harrington, Fargo.

Ohio Hardware Association.
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., W. C. Jones, Columbus.
Treas., L. F. Stahler, Waverly.
Ex. Com., John C. Fuhr, Williamsburg; John Kramer, Dayton, C. W. Jewell, Utica; W. A Perry, Zanesville; Frank W. Ingalls, Byran.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. L. Moore Brownsville.
V.-P., Geo. J. Rudolph, Pittsburg.
Sec., J. E. Digby, McKees Rocks.
Treas., B. A. Maggine, Braddock.
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

St. Louis Stove Dealers' Assn.
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

Southern Hardware Jobbers' Assn.
Pres., W. M. Crumley, Atlanta, Ga.
1st V.-P., John Donnan, Richmond, Va.
2d V.-P., E. A. Peden, Houston, Texas.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Retail Hdw. and Imp. Assn.
Pres., S. L. Erwin.
1st V.-P., W. M. Grunnell.
2d V.-P., J. D. Carroll.
Sec., J. W. McManus.

Wisconsin Hdw. Dealers' Assn.
Pres., H. L. McNamara, Janesville.
V.-P., Ralph Burtis, Oshkosh.
Sec.-Treas., C. A., Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; E. R. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 38 to 42 inclusive.

H. Hintz is a new Smartville, Neb., hardware dealer.

Wm. Stangler is a new Sharpsburg (O.) hardware dealer.

N. E. Slack, an Oconto, Neb., hardware dealer, died recently.

Ed. Nichols, a Stroud, Okla., hardware dealer, died in New Mexico on April 20th last.

T. A. Drayton succeeds Drayton & Tildenson in the hardware business at Orchard, Neb.

R. W. Laing has sold his interest in the hardware firm of W. L. Speer & Son, Geneva, Neb.

Wiener & Co., Newark, N. J., hardware manufacturers were visited by fire on April 23rd last.

Lillibridge & Wondra are succeeded by Lillibridge & Sons in the hardware business at Weston, Neb.

Kippenberg & Hahn are a new Harvard, Ill., concern, who will manufacture an adjustable wrench.

H. L. Ugland & Sons, Knox, N. D., hardware dealers, have dissolved partnership, H. L. Ugland continuing.

The Mengold-Moore Implement, Hardware & Harness Co., Anna, Ill., have changed their style to the Mengold-Alden Co.

George L. Lighthall, a Wapello, Ill., hardware dealer, filed a petition in bankruptcy recently with liabilities of $10,109.66 and assets of $244.

Peter Dittmer and P. J. Evers have purchased the business of the Champion Washing Machine Co. from Silberstein Bros. at Clinton, Iowa.

A receiver has been asked for the Indianapolis Staple & Tack Co., Indianapolis, Ind., by the Indiana Rolling Mill Co., also of the same city.

M. L. Langford, a Yazoo City, Miss., hardware dealer, filed a petition in bankruptcy April 25th, with assets of $8,000 and liabilities of $11,000.

Robert J. Beatty is president, Frank McCafferty is vice-president, and C. W. Drake is treasurer of the Bounds Wire Fence Co., Columbus, Ohio.

W. A. Carpenter, S. S. Carpenter, L. F. Carpenter, J. E. Carpenter, and F. P. Kientz are the incorporators of the Carpenter Hardware Co., Glouster, O., capitalized at $50,000.

T. W. Dixson, E. C. Britcher and H. D. Coville are the incorporators of the Amenoco Novelty Co., Syracuse, N. Y., capitalized at $25,000, for manufacturing hardware specialties.

The William Henry & R. E. Bell Hardware Co., Fort Worth, Tex., have sold their business to J. B. Burnside, who will conduct it in the future under the name of J. B. Burnside.

The hardware trade generally will learn with regret of the death of Tom Langton which occurred at Peoria, Ill., April 10th. Mr. Langton was in his thirty-ninth year and leaves a wide circle of friends to mourn

his loss. For thirteen years he was price clerk for Clark, Quien and Morse.

The annual meeting of the Retail Hardware Implement and Vehicle Association of the Indian Territory will be held in Oklahoma City, O. T., on May 10 and 11, with headquarters at the Grand Avenue Hotel.

J. A. Chenoweth, Wm. Funderburg, Benbow Horton, A. A. Smith, E. E. Jones, A. Fuhmeg, J. E. Bonebrake, H. W. Cumpton and J. W. Freebon are the incorporators of the Oklahoma Retail Implement & Hardware Co., El Reno, Okla.

Reason McFarland, for a number of years in the hardware business at Pittsburg, Kans., died at the residence of his son, James McFarland, Girard, Kans., on April 19th last. He was in the 68th year of his age and leaves a family of five sons.

S. McGranahan, Davenport, Iowa, sends us a little postal calling attention to the Mack washer. The tub in this washer is made of cypress, and it has corrugated sides and bottom; the castings and hoops are all aluminum bronzed, making an attractive and durable washer.

The trade will regret to learn of the death on April 23rd last of James A. Farless, Boston, Mass., the secretary of the New England Hardware Dealers' Association since its formation in 1893. Mr. Farless was in the 77th year of his age and leaves a widow and two grandchildren.

A. C. Rulofson, with Baker & Hamilton, San Francisco, Cal., hardware dealers and president of the Pacific Coast Hardware & Metal Association, has just emerged victorious from one of those Jarndyce vs. Jarndyce cases over a valuable estate in which, he received a handsome share as one of the heirs.

The Goldenberg Co., 1837-1839 State St., Chicago, dealers in house furnishings of all kinds, get out some attractive circulars made in imitation of a cottage. When opened up they show steel ranges and other articles of furniture in the different rooms, and furnish a number of hints on which hardware dealers could doubtlessly act to advantage.

The Security Lightning Rod Co., Burlington, Wis., claim to be patentees and manufacturers of the only copper automatic water receiver for perfect ground connection. They are also manufacturers of improved copper lightning conductors. They not only manufacture lightning rods, but can furnish any kind or color of glass balls for lightning rods, red, white, blue, green, amber, turquois and silver, also all other fix.

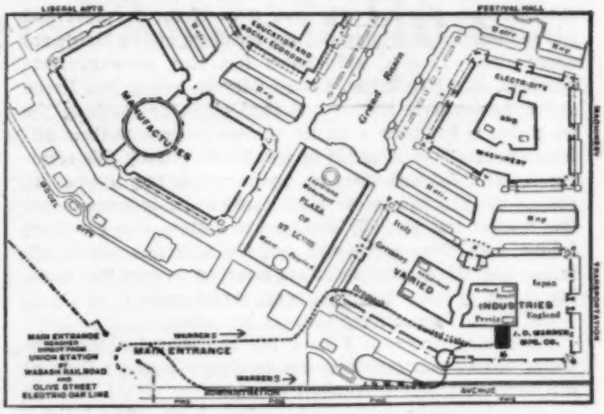
The Telephone Appliance Co., 1 Madison Av., New York, are offering the trade the telephone appliance which is a device for recording names. It meets the wants of those desiring quick service. It has the indorsement of such concerns as the Holmes, Booth & Hayden Co., New York; Standard Sanitary Mfg. Co., New York; Metropolitan Life Insurance Co., New York; Welsbach Gas Lamp Co., New York, and The Sperry & Hutchinson Co., New York.

The Joseph Dixon Crucible Co., Jersey City, N. J., send us a little booklet calling attention to Dixon's graphite pipe joint compound. This compound has been in use for more than a quarter of a century and has been adopted as standard by many railroad companies, gas companies, boiler manufacturers, radiator manufacturers and others. This compound is invaluable for use on all sizes and all kinds of threaded joints and is also invaluable for smearing gaskets, flanges and faced or ground connections of all sorts, bolts and bolt holes, nuts, studs and caps. One of these booklets will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

Clark, Quien & Morse, hardware jobbers of Peoria, Ill., are now occupying their new and commodious warehouse building. It is one of the most modern up-to-date business structures and is replete with every modern convenience and business appliance. The building covers a lot 74x155 feet which adjoins their factory building of 59x155 feet and extends through from Commercial street to South Water street. They have a railroad siding entering their building so four cars can be loaded and unloaded at the same time all under cover. They also have a driveway for wagons for city delivery so four wagons can be loaded and unloaded at the same time also under cover. This enterprising firm have greatly increased their assortment since they have increased their facilities for handling their increasing trade.

THE WARREN MODEL HARDWARE STORE.

The J. D. Warren Mfg. Co., Masonic Temple, Chicago, will have a most attractive and instructive exhibit at the St. Louis World's Fair in the shape of the Warren model hardware store, 20x45 feet, in the first building at the right from the main entrance—Varied Industries—the model store being located on the north side, directly in front of Entrance No. 16. In a letter to the trade about the value of this exhibit



Location Warren's World's Fair Exhibit.

to hardware manufacturers, jobbers, retailers, traveling men, clerks and other employes, this firm say:

"One of the special features of the World's Fair is 'Object Lessons,' of which this will be one of the most interesting to hardware people. It was originated and is manufactured by a hardware man (whose name it bears) for hardware men. Meet him, talk with him, and see if you cannot learn of an easier, better, more profitable and pleasant way of arranging the store in which your life may mainly be spent."

Social Session Peoria Retail Hardware Merchants' Association.

The Peoria Hardware Merchants' Association has long been recognized as one of the most progressive among the retail hardware associations. On April 27th last, they inaugurated a most successful innovation in the shape of a social session to which all the members, with their clerks, were invited. The raison d'etre of this session was to create a better feeling between employer and employe and to exemplify practically the value of the get together idea.

President Wm. Bittel took the chair and started proceedings by delivering an address in which he emphasized the fact that in "union there is strength." He expressed his pride in the magnificent audience of sixty before him, and told of his delight at the generous measure of success which had been meted out to the organization. He extended a cordial welcome to those in attendance.

Mr. Bittel was followed by H. Sandmeyer, Sr., who has had 53 years' experience in the hardware business in Peoria and has made an enviable record during that time.

The next number on the program was mandolin and banjo playing by Messrs. Becker and Keucks, who proved to be experts.

The next number on the program was an address by Frank Meyer. Mr. Meyer called attention to the fact that in 1864 tinners received the palatial compensation of $12.00 per month. The first job which he remembers undertaking at this craft was that of soldering a spout on a tea kettle in 1859, while working for Moore & Sandmeyer. In those days the tinners' trade was A No. 1, all tinware being handmade. He started in business in 1866 with $200 capital and had been faithful to himself as well as to his customers.

The fifth number on the program was a song by Henry Sandmeyer, Jr., entitled, "Because I Love You, Dear." As an encore he gave the song, "Sing Me to Sleep."

The sixth speaker on the program was Robert Strehlow, who addressed the gathering as follows:

BASHFUL MEMBERS.

The invitation I received from the committee to address a few words to this gathering to-night was made with the idea that something had to be done to overcome the proverbial and well-known bashfulness of the members of the Hardware Association. It is a well-known fact that some of their members, like Mr. Balzer, George Meyers, young Mr. Kroos and a few others, are so backward about approaching the trade that it has been a matter of deep concern to their different houses how it would be possible to remedy this seeming defect. No assurance on my part that they seemed to possess the requisite nerve would suffice and in consequence this smoker was partially arranged to destroy that backward feeling with these gentlemen, and the addresses which will follow and the entertainment are intended to cure this seeming defect of these otherwise most perfect men.

COMMITTEE LACKING IN NERVE.

Seriously, however, I have felt at times that the committee having this entertainment in charge lacked a little of the nerve themselves required or else they would not call on so many passive members for talks. I am a firm believer in the benefits which arise from this association, both in a business way and socially, and much good has already been accomplished and a great deal more is possible if the members will but put a little of their thought towards that end and give their meetings the benefit of a full attendance, so that matters coming up before that body can have the benefit of each member's opinion. In this way, much good can be accomplished and further on, if you entertain co-operative buying as it is now practiced by the Master Tinners, much pecuniary benefit will also accrue.

A RETROSPECT.

For the benefit of our employes I might be permitted to go back twenty years ago and make a few remarks about conditions at that time. I well remember that my store hours were such that the only time when I could see my little boy awake was Sundays. I lived then where I do now. At 7 o'clock we were at the store and it was kept open until 9 o'clock at night or 10 o'clock if we had a customer. We would wait on customers all day and attend to the mail at night. How much better these arrangements are now. All of this is accomplished by a better understanding between the merchants and it is brought about by an association of this kind, without loss or pecuniary injury to anyone. Years ago we used to think that the worst enemy we had was our competitor; now we believe that with his help and co-operation we can have better hours, a more reasonable life and as much profit and more as when we cut under every price we heard of and in this way establish a price that would be knocked out by our friends at the next deal which came up.

PRICES SHOULD BE ADHERED TO.

Prices, once established, should be adhered to. Let the individuality of the saleman and his efforts and ability bring about the sale rather than a cut in the price. The prices established are reasonable; everyone who has anything to do with the making of them knows this to be a fact. Then, if this is a fact, why should they be changed. The essential feature to my mind in every store is the enthusiasm and alertness of its clerks. They can do much towards bringing the business on a paying basis. Our hours are much better than formerly and while at the store we can all enter into the daily occurrences with such vigor that we will get some of the persimmons even if we haven't got the longest pole. Co-operation between the bosses and the clerks is just as essential, and every clerk who makes himself valuable should receive the proper recognition. The salaries of clerks are much like rent. The size should cut no figure.

DIFFERENCES IN STORES.

A man who continually makes good sales of profitable goods and is busy all day long for the benefit of the store should get more than one who does not do so. A store that is in a prominent place in a town brings more rent than one that is out of the line of trade. Along these lines much might be said that is of interest to this audience, but my allotment of time is limited. There are other speakers to-night and I must not encroach upon their time. You know the rule—the heavy artillery comes last, and I will have to give up to the better speakers. I thank you for your attention.

Mr. Strehlow was followed by Daniel Stern of THE AMERICAN ARTISAN, who prefaced his remarks by a number of humorous stories, one of them being about a little adventure of Secretary L. M. Reeves of the association. Mr. Reeves, it appears, had formed pleasant anticipations by reading an advertisement in which it stated that a spicy story would be forwarded to anyone sending a dollar. After his remittance had been duly made, he received a small booklet, whose wrapping he hastily tore off with itching fingers, only to find that the book he had received was entitled "An Essay on Raising Cloves in Ceylon"—hardly the kind of spicy story that he had expected.

A second story was that of an Englishman and an American who got into conversation over the merits of their respective countries in the manufacturing line, and the American scored on his cousin across the water as follows: "You see, my dear Johnnie Bull, we make everything in this country that you make in England—it makes no difference whether the line be penny pins or bascule bridges, calico cloth or pie plates, and moreover, there is one thing we make in this country that no Englishman has ever made yet, and that is haste."

Continuing, Mr. Stern said: I wish to compliment the employes present on account of the entertainment which has been so generously tendered them by their employers. I also wish to compliment the employers on the fraternal spirit in

which this social session has been tendered. The degree of harmony existing in any branch of work, either manufacturing or distributing, is the barometer of commercial success. I am glad to see how magnificently Peoria is living up to the get-together idea. The Chicago Retail Hardware Dealers' Association have exemplified this idea with marked success by holding an annual ball every January and an annual picnic in mid-summer every year, which has had a marked tendency in promoting trade sociability and trade harmony, and I might suggest that this session evening of yours might be profitably supplemented by following in their footsteps.

Gentlemen, I thank you for your kindness in placing me on your program.

Mr. Stern was followed by Master William Bruninga, Jr., a petrocious nine-year-old, who sang a pretty little song entitled "The Witch Behind the Moon."

Wm. Dickson delivered an interesting address, in which he gave a review of early business conditions. He urged the careful consideration of the point of the profitableness of social gatherings, as one would find the best side of his competitor at such social functions. Furthermore, improvement in business was brought about by local organization. For instance, it was only through this means that early closing was a possibility, and this was certainly decidedly beneficial to the mercantile world.

Addresses were then made by P. Johnson, George Meyer, J. L. Douglass and J. K. Neilsen, after which Becker and Keucks gave another of their inimitable performances with the banjo and mandolin.

E. R. Kroos then addressed the gathering as follows:

NEED PROPPING.

We as men are not, as a rule, self-reliant and independent. We need props and aids, both to stand and to move, so let each and every one be a prop for the other and look to the interest of our employer. Each of us has his appointed place and part in this great world, and however insignificant we may be, or however low the place assigned to us, we may be assured that all depends on us whether or not we reach the top of the ladder. So it is useless for us to find fault with our particular place or kind of work assigned to us. Each one must fill his own place and do his own work if he wishes to succeed. If we refuse or do the work illy, the world casts us aside as rubbish and chaff, whose end is to be burned.

HARSH BUT JUST.

Harsh, perhaps, but who can say it is not just? Do not be discouraged because when you have climbed each thorn and are just ready to grasp the rose, you see staring you in the face a great, fat, green worm, with whiskers behind and whiskers before. Just think of that as one of the little obstacles placed there for you to overcome and be determined to conquer it. So that the highest success can be reached only by being master of all.

THE TREATMENT OF CUSTOMERS.

Before closing would like to speak of one thing in particular—that is the treatment of our customers. Be pleasant, for if we do not exercise the art of pleasing we do not fulfill every duty, for a lack of it shows a poor business education. Be polite, for politeness has great influence over many people as it demands respect and shows considerable refinement on the part of the clerk, and by following this up very carefully you will find that people will come into your place of business and ask for you, and this is something that will prove beneficial to all parties concerned, and, last but not least, it should not be forgotten that he who has no superior has thousands of equals.

Mr. Kroos was followed by Frank Bush, who gave some invaluable advice to young men urging them, among other things, to be patient and to get together and become acquainted.

This very successful entertainment closed with an interesting athletic contest, after which an appetizing lunch was served and an hour was spent in social converse.

The firms belonging to this successful association are as follows: Wm. Bittel, Hunter & Strehlow, H. Sandmeyer & Co., F. Meyer & Bro. Co., Chas. Johnson Hardware Co., Balzer & Reeves, M. Pfeifer & Co., A. B. Weers, R. L. Wilson & Co., O. C. Slane, Martens, Robinson & Co., Peoria Coal Drill & Hardware Co., J. P. Becker, Theo. Folkers, F. W. Treager, H. J. Ehlen, J. S. Tammen and C. H. Tammen.

Oklahoma Retail Implement and Hardware Dealers' Association.

The Oklahoma Retail Implement and Hardware Dealers' Association was formed in El Reno, O. T., on April 20th and 21st last.

The following officers were elected to serve until the annual meeting to be held on the third Tuesday in next November:

President—O. A. Smith, Watonga.

Vice-President—W. L. Perkins, Granite.

Secretary—J. A. Chenoweth, Leger.

Treasurer—S. E. Haggard, El Reno.

Territorial Vice-Presidents—C. P. Hamilton, Mangu, Greer county; A. C. Lucas Hobart, Kiowa county; C. W. Amspacher, Apache, Caddo county; D. B. Berry, Cordell, Washita county; Walker R. Payne, Clinton, Custer county; N. B. Utt, Elk City, Roger Mills county; H. M. Herms, Taloga, Dewey county; O. N. Minton, Gage, Woodward county; C. O. Greene, Alva, Woods county; J. Bixler, Hitchcock, Blaine county; W. S. Watson, Pond Creek, Grant county; C. B. Cowles, Enid, Garfield county; Frank Banker, Kingfisher, Kingfisher county; C. Kimmell, El Reno, Canadian county; T. J. Griffith, Oklahoma City, Oklahoma county; W. D. Packard, Guthrie, Logan county; J. McCormick, Perry, Noble county; F. A. White, Manchester, Grant county; A. Levick, Ralston Pawnee county; Wm. McVickery, Blackwell, Kay county; C. V. Liter, Guthrie, Logan county; Carter Tracy, Beaver, Beaver county; J. N. Johnson, Chandler, Lincoln county; Frank C. Woodworth, Maude, Pottawatomie county; J. L. Little, Lexington, Cleveland county.

Advisory Board—J. E. Bonebrake, El Reno; J. B. Yount, Ft. Cobb; C. J. Chastian, Cleo; L. L. Collins, Cheyenne; W. M. House, Shawnee.

Directors—W. T. Funderburg, Mangum; J. L. Halstead, Cherokee; A. H. Smith, Arapaho; R. S. Frazer, Stillwater; V. D. Tinkelpaugh, El Reno; O. A. Smith, Watonga; T. J. Griffith, Oklahoma City.

Legislative Committee—C. S. Watson, Pond Creek; G. E. Johnson, Sayer; J. W. Freeborn, El Reno; P. T. Benbow, Lawton; W. P. Packard, Guthrie.

The committee on constitution and by-laws made the following report:

CONSTITUTION AND BY-LAWS.

ARTICLE I.

Sec. 1. The name of this association shall be the Oklahoma Retail Implement and Hardware Dealers' Association.

ARTICLE II.

Sec. 1. The purpose of this organization shall be the promotion of the interests of the retail implement and hardware dealers of Oklahoma Territory and to secure their friendly co-operation in all matters pertaining to their welfare.

ARTICLE III.

Sec. 1. Any person of good standing and who is engaged in the retail hardware or implement business in Oklahoma or Indian Territory may become a member of this association when recommended by a majority of the executive committee and upon payment of a membership fee and annual dues prescribed by the by-laws of this association.

ARTICLE IV.

Sec. 1. Each member shall be entitled to a certificate of membership bearing the official seal of the association signed by the president and secretary, and shall designate on its face the name of the person to whom it is issued and shall grant the privileges of the association to such person.

Sec. 2. Each member shall pay a membership fee of $1, and also annual dues to the amount of $2, payable annually in advance for the support of the association. Additional income may be secured by voluntary subscription made by the members of the association or citizens of Oklahoma Territory under the direction of the board of directors.

Sec. 3. The annual dues of each member shall be for the current year.

Sec. 4. Annual dues shall be due and payable three months before the annual meeting, and for negligence or failure to pay the same on or before the annual meeting such member shall be excluded from the privileges of the association. And for failure to pay dues for any cause for a period of six months after the date of meeting, the certificate of membership in said association shall be forfeited.

Sec. 5. All resignations shall be made in writing and filed with the secretary, but if such resignation be filed after payment becomes due, such member shall not be relieved from liability for such payment and shall not be permitted to withdraw honorably unless all dues are paid.

ARTICLE V.

Sec. 1. The officers of this association shall consist of president, vice-president, secretary, treasurer, an advisory committee of five members, and a board of seven directors, and one vice-president to be selected from each county in the territory. All of said officers shall be elected by a majority vote of the members of the association, except the president and secretary, who shall be elected by the board of directors, at their annual meeting.

Sec. 2. The board of directors shall have the control and general management of the affairs of the association, and shall consist of seven members to be selected by the association at large. The board of directors shall also have the power to define the duties of all the officers, committees, agents or employes of the association, and in general to do such acts and adopt such measures, not inconsistent with the by-laws of the association, and as they shall deem calculated best to promote the interests of this association.

ARTICLE VI.

Sec. 1. The board of directors shall hold regular meetings on the third Tuesday in November of each year. A majority of the board shall constitute a quorum for the transaction of business at any regular meeting.

Sec. 2. The board of directors shall submit a report of the condition and finances of the association at each annual meeting.

ARTICLE VII.

Sec. 1. It shall be the duty of the president to preside at all the meetings of the association and of the board of directors. He shall perform all duties incident to the office, and shall advise the board to take such action as they deem likely to add to its usefulness and prosperity.

Sec. 2. The vice-president shall act in the absence of the president, and in the absence or disability of both officers, a territorial vice-president to be chosen by the board shall act temporarily.

Sec. 3. It shall be the duty of the secretary to collect and record all information of value to the association; conduct official correspondence, preserve all books, records, documents and communications, collect all dues and pay the same to the treasurer; keep an accurate record of the proceedings of the association, its board of directors, and all committees.

He shall present a full report of the work of the year at the annual meeting, and perform all the duties incident to his office, subject to the supervision of the board of directors, and shall mail to each member a copy of the quarterly reports of the secretary and treasurer, and shall perform such other duties as shall be prescribed by the board of directors.

The secretary may also have the power to call an executive session of the board of directors and advisory board upon request of any five members of the association and for the purpose of placing before such executive session such matters as may be of immediate importance and that in his judgment should have immediate attention.

At the expiration of his term of office, the secretary shall deliver to the board of directors all the books and papers and other property of the association which may have been entrusted to his care.

ARTICLE VIII.

Sec. 1. The advisory committee shall consist of five members, none of whom shall be members of the board of directors. Three members of such committee shall constitute a quorum for the transaction of business. It shall be the duty of the advisory committee, when duly notified by the president or secretary, to attend any meeting designated.

ARTICLE IX.

Sec. 1. The treasurer shall have the care and custody of the funds of the association and disburse the same only on the order of the secretary countersigned by the president. He shall keep all moneys of the association deposited in its name, and make annual reports to the board of directors.

ARTICLE X.

Sec. 1. Special committees may be appointed by the president at the request of the board of directors, and are subject to its approval.

Sec. 2. Reports of all committees must be submitted in writing and filed with the secretary. All committees shall submit reports to the association at each annual meeting, or as directed.

Sec. 3. A majority of any committee or joint committee shall constitute a quorum for the transaction of business.

ARTICLE XI.

Sec. 1. The annual meetings of this association shall be held on the third Tuesday in November of each year.

ARTICLE XII.

Sec. 1. The annual meetings of this association shall be held at its principal place of business and as provided for by the charter, and thirty members shall constitute a quorum for transaction of business.

Sec. 2. Special meetings of the board of directors, or of any committee, may be called at any time by the president upon written request of five members.

Sec. 3. Upon motion of any member, the association may, by two-thirds vote, go into executive session.

ARTICLE XIII.

Sec. 1. The annual election shall be held at the regular annual meeting of the association.

Sec. 2. All voting shall be by ballot, and each certificate of membership shall be entitled to cast one vote. No proxies shall be allowed.

Sec. 3. A majority of the votes cast shall constitute an election.

Sec. 4. The polls shall be open at such times during the annual meeting as the board of directors may designate.

ARTICLE XIV.

Sec. 1. The regular order of business at such meetings shall be as follows:

(1) Call to order. (2) Roll call. (3) Reading minutes of last meeting. (4) Communications. (5) Reports of officers. (6) Reports of committees. (7) Unfinished business. (8) Election. (9) New business. (10) Adjournment.

ARTICLE XV.

Sec. 1. These by-laws may be altered or amended by two-thirds vote of those present at any annual meeting, provided that due notice of such proposed change shall have been made by giving thirty days' notice to each member in writing and incorporating in said notice the amendment to be offered.

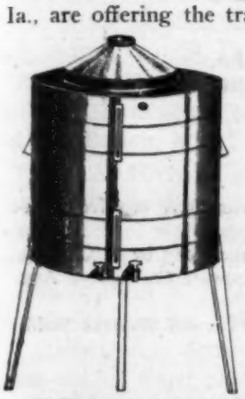
ARTICLE XVI.

Sec. 1. The proceedings of the association shall be conducted by and according to the last edition of Robert's rules of order.

Sec. 2. All resolutions offered must be handed to the secretary in writing.

ELGIN CREAM SEPARATOR.

The Norris & Loring Hardware Co., Cedar Rapids, Ia., are offering the trade the Elgin cream separator shown herewith. The inner can has an upright tube connected with the water in the outer tank, thereby affording a complete circulation of water, both inside and outside the inner can.



Elgin Cream Separator Outside View.

A hose may be attached to the opening of the tube and a current of water allowed to run through the creamer.

The milk, as it is strained into the creamer, falls on the inner tube, and is thoroughly aerated as it passes into the creamer, thus cooling the milk rapidly.

Elgin Cream Separator Sectional View.

There are both upper and lower gauges, thus showing when all the cream is raised.

The inner tank is made round and the bottom is double seamed on, thus making the strongest and most perfect can on the market.

The outer tank is made of heavy galvanized iron and bottom double seamed on, which makes it stronger and less liable to leak, and is mounted on legs.

The cover is also used as a strainer, and has removable cone wire strainer.

Removing the cone wire from the strainer and placing the perforated tin disk in the cover allows perfect ventilation for the milk at all times.

The inner tank is enameled with our special enamel and will not rust.

The inner can is easily removed for cleaning, by unscrewing the faucet.

The inside can of the Elgin is made of IXXX charcoal tin plate, and the seams are soldered with the best grade of solder. The flux used is palm oil. This is the only separator, of this style, sold in Iowa, which is made with legs, it is claimed. This makes it unnecessary for the farmer or his wife to hunt around for a box or build a bench on which to place these separators when in use. It also obviates the necessity of removing the separator from time to time for purpose of cleaning, etc.

The cone shaped strainer, made of brass wire strainer cloth, gives much more straining surface than other separators, it is said.

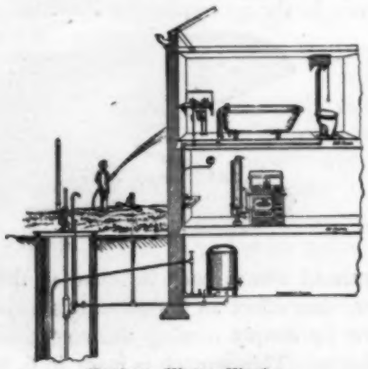
Placing this separator on legs is this firm's own improvement, and they control the selling rights for Iowa. They are having a nice business on these goods.

They give the agency for this separator to one dealer only in each town.

HORIGAN WATER WORKS.

The Horigan Supply Co., St. Joseph, Mo., are manufacturers of the Horigan water works, shown in the accompanying illustration.

The system consists of pumping the water from well or cistern into a steel tank usually placed in the basement, against the air, which, being compressed, creates a pressure strong enough to force the water to any part of the house. The tank is supplied with a hand hole or cleanout, which enables the owner to remove the dirt and sediment which necessarily accumulates without digging up the tank and disconnecting the entire system. The convenience of this arrangement, in connection with a stop cock on the supply pipe, by which the tank and entire system can easily be drained, will be readily appreciated. A water pressure gauge shows at a glance, and at all times, the exact amount of pressure that the tank contains, obviating by this means the liability to excessive pressure, when not known, and consequent injury and damage to the pipes and fixtures, which, as a rule, are not intended to stand severe pressure. Attached to the main supply pipe is a specially constructed hydraulic valve, which is so arranged that at given pressure, say 40 to 60 pounds, it operates automatically, conveying the surplus water back to the well, and at the same time maintaining a uniform pressure on the tank. This device is especially adapted for use where a windmill furnishes the power. The tank is placed in the basement, or cellar, where it is accessible at all times. From it the supply pipes carry the water to the various fixtures, thus affording all the luxury and comfort of a city residence, without the expenses of water rental. The water being forced through a check valve from the pump into the tank, fills the openings at the bottom of the tank, preventing any escape of air, and thus compressing the air, until pumping is stopped. The pressure thus obtained is sufficient to force the water into any part of the house, barn or lawn, with a strong pressure, and will throw water from 50 to 80 feet high, according to pressure, as well as supplying the ordinary house fixtures with hot and cold water, and affording the owner such comforts as are usually attainable only in cities.



Horigan Water Works.

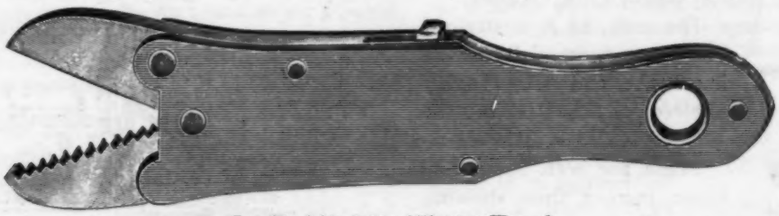
THE QUEST FOR HEALTH.

The Oakwood Publishing Co., 29 Beacon St., Boston, Mass., send us a little booklet with this title, con-

taining about 500 testimonials from leading educators, clergymen, business men, doctors, authors, etc., singing the praises of cycling. We believe that every dealer who handles bicycles should send for one of these books, as he can secure from it a fund of valuable matter for use in advertising bicycles and in talking them up to prospective customers. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

CRONK'S ADJUSTABLE ALLIGATOR WRENCH.

The Cronk & Carrier Mfg. Co., Elmira, N. Y., are offering the trade the Cronk adjustable alligator wrench, shown in the accompanying illustration. The



Cronk's Adjustable Alligator Wrench.

special feature of this wrench is found in the device by which one can effect an instantaneous adjustment. This is done by simply moving the mechanism with thumb or finger. This wrench is made in 6, 8 and 10 inch sizes respectively, opening ¼ to 1 inch, ¼ to 1¼ inches and ¼ to 1½ inches. It is nicely polished and nickeled.

SPRINGTIME SEEDS.

One of the Chicago congressmen looks after the writer pretty thoroughly in the matter of furnishing seeds for petunias, foxglove, fancy corn, etc., all of which he intends to raise in large quantities on the 4x6 back porch of his "flatulet." Dana & Co., the Cincinnati ice cream freezer people, are sending the trade some freezer seeds. These seeds are little cards advertising the Peerless Iceland freezer. Plant one of these freezers in a convenient place in the kitchen, "water" it with a little cream, "fertilize" it with ice and salt and "cultivate" it with a few turns of the crank, and you get a "crop" of delicious ice cream. Unlike other crops this does not exhaust the "soil," as you can "harvest" all the crops you want from this prolific "loam." It is a clever advertising idea and deserves credit.

BUSINESS CHANGES.

NEW FIRMS

Bangor, Me.—McCurdy & Goehegan.
Boise City, Idaho.—J. K. Loree & Son.
Croghan, N. Y.—Frank M. Zehr.
Dunkirk, N. Y.—S. R. Cole.
Medina, N. Y.—John Chase and Carl H. Breed.
New York, N. Y.—J. C. McCarty & Co.
Oakland, Cal.—The Robert Dalziel Co.
Passaic, N. J.—The Forsythe Hardware Co.
Philadelphia, Pa.—The Messinger Hardware Co.
Scammon, Kas.—Mackie Anderson Hardware & Furniture Co.
Trenton, Ill.—The Leonard, Brefeld & Sauter Hardware Co.
Wilkesbarre, Pa.—Elmer Williams.
Watkinsville, Ga.—W. T. Ashford.
Longview, Tex.—The Northcut Hardware & Furniture Co.
Dent, Minn.—H. Winkler.
Everdell, Minn.—J. Kelly.
Robbinsdale, Minn.—Chas. Schuller.
Strabuck, Minn.—Leonard Smedstad.
Emerald, Wis.—W. L. Calkins.
La Crosse, Wis.—E. J. Doerre.
Roland, Ia.—Twede & Boston.

CHANGES.

Walters, Minn.—Helle & Hoverson have dissolved partnership.
Echo, Minn.—W. H. Garry is succeeded by E. O. Berg.
Truman, Minn.—The Ebert Hardware Co. succeed Aug. Ebert.
Riverton, Ia.—Smith & Sherlock succeed Sherman Smith.
South St. Paul, Minn.—Gardie & Erick succeed Edw. J. Kuse.
Mt. Pleasant, Ia.—T. A. Niece & Co. are succeeded by George Crane.
Nevada, Ia.—Willard, John & Co. succeed C. E. Markaland.
Wyndmere, N. D.—Olsgard & Mellin are succeeded by Mellen & Haugen.
Grafton, N. D.—J. F. Verreau succeeds O. Durocher.
Flaxton, N. D.—Hovland, Swannes & Co. are succeeded by Berg & Swannes.
Garfield, Wash.—The Hale-Gill Co. are succeeded by J. Crumbaker.
Kennwick, Wash.—Rudlow & Schweikert are succeeded by J. P. Reid.
Allentown, Pa.—Martin Graver is succeeded by F. Hersh & Sons.
Ann Arbor, Mich.—H. T. LeFurge is succeeded by J. W. Gale & Son.
Anniston, Ala.—The Dixie Hardware Co. are succeeded by L. T. Smith and Ray Smith.
Hartford, Conn.—Stedman & Co. have sold an interest in their store to Leon M. Case.
Jackson Center, Pa.—Willis B. Taylor is succeeded by Joseph S. Laughlin.
Knoxville, Tenn.—R. Z. Roberts succeeds Adams Bros. & Co.
Little Valley, N. Y.—E. E. Parsons is succeeded by A. J. Pratt.
Mansfield, O.—W. F. White is succeeded by John Drake.
Oakland, Me.—D. M. Marshall & Co. succeed Marshall Bros.

MISCELLANEOUS.

Zumbrota, Minn.—Myron & Olson are erecting a new building.
Crookston, Minn.—A. O. Busterud is making extensive improvements in the interior of his store.
Langdon, N. D.—E. C. Dedrich is about to erect a 25x100 foot addition.
Kennedy, Minn.—Johnson Bros. have leased the building of A. J. Rossberg and are installing a stock of buggies and hardware.

STOPPAGES.

Hamburg, Minn.—Henry Dittmer has discontinued.
Dexter, Ia.—E. H. Marston has sold out.
Arlington, Ia.—J. O. Hoover & Co. have discontinued.
Canyon, Tex.—The Donohoo-Ware Hardware Co. have sold out.

Heating and Ventilating

The Robert Rom Co., Milwaukee, Wis., dealers in steam fitters' supplies, have moved to their new buildings at 1023-1101 St. Paul Ave., that city.

Harry S. Upham is president, and Wm. G. Phillips is treasurer of the New England Heating & Supply Co., Boston, Mass., capitalized at $10,000.

Frank A. Hecht is president and F. F. Vater is secretary of the Power Plant Specialty Co., Chicago, to manufacture steam separators, open feed water and water softening systems.

John E. Frost, S. J. Hall and Fred Lavalley are the incorporators of the Elmira Heating Co., Elmira, N. Y., capitalized at $50,000, for the manufacture of steam and hot water heaters.

The New York City Master Steam & Hot Water Fitters' Association held their annual meeting recently and elected the following officers for the ensuing year: President, Charles A. Geoghegan; vice-president, Frank Dobson; treasurer, Wm. J. Baldwin, Jr.; secretary, Henry B. Gompers. Board of Directors: Charles A. Geoghegan, chairman; Wm. J. Baldwin, Jr., Charles N. Brizse, Albert N. Chambers and Frank Dobson.

The Chas. Smith Co., 101 Lake street, Chicago, are sending out some effective advertising matter to the trade. This consists of a series of six paste board cards, 5½x9 inches in size. The first of these cards calls attention to the Hero ash pit and grate and also gives a table of standard dimensions of wrought iron, welded, steam gas and water pipe, also the area of circles. This card is followed at intervals at a week by five others, calling attention respectively to the Hero ash pit and a combination heating plant in a twelve-room residence; the Hero fire pot, and a drawing showing Smith's little Giant connected to two radiators and expansion tank; the Hero dome and drawing showing Smith's circular Giant connected to two radiators and flushing tank for expansion; the Hero dome, interior view and cut showing water heater connected to two radiators; the Hero radiator, Smith's Little Giant water heater, and Smith's Circular Giant; and the Improved Hero for hard or soft coal and Smith's Maltese water heater. After a dealer has been supplied with the entire series in rotation, they are sent altogether, neatly bound with blue cord.

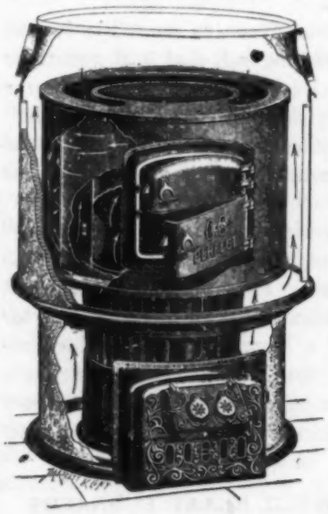
MONITOR FURNACES AND COMBINATION HEATERS.

The Keith Furnace Co., Des Moines, Ia., send us a little booklet describing the Monitor furnaces and combination heaters. The Monitor cast iron one-piece radiator with indirect draft, has no diaphragm plates, no dampers and no joints. The Monitor steel return flue radiator has large double feed doors, deep ash pit, and ample circulation of air in the heating chamber.

The Monitor wood furnace has a very durable construction, large feed doors, ash pit full length of grates, radiator with large surface and indirect draft. It has a large space through the center. The Monitor hot air registers are heavy and well finished. Their special side wall registers are a new and original design. The Monitor hot air pipe and fittings are made of good material by the latest improved machinery.

"PERFECT" FURNACES.

The accompanying cuts show two of the desirable line of "Perfect" furnaces, manufactured by the Richardson & Boynton Co., 84 Lake street, Chicago.



New Perfect Coal and Wood Furnace

The new "Perfect" furnace for coal and wood are filling a large demand for a heater in which coal is mostly used.

They are large furnaces with large diameters and sizes of combustion chamber on account of the double fuel purposes for which they are intended. They are splendidly constructed, very strong and durable, put together by machine, with the largest diameter as well as height of revertible-flue combustion chamber that has ever been put into a furnace, it is claimed.

New Perfect Soft Coal Furnace.

The circulation of air is directly upward from the base, through to the top of the body. The smoke is all carried to the front and backwards on both sides outside of the air space. The result is the flame has a long fire travel.

They are fitted with large double-feed doors, so that chunks of wood can be utilized when wanted, and also fitted with wood grates constructed especially for wood fuel. These are intentionally enormously powerful coal furnaces, especially made for coal, but with the conveniences they have can have wood-burning facilities combined with those of coal. This construction gives a furnace in which a consumer can use either fuel, one as well as the other—a feature that is much appreciated in wood sections of the country.

The ash-pits are large and deep. The furnaces are fitted with "Perfect" triangular grate bars, keeping

the ashes out from the fire chamber and permitting easy agitation of the fire.

The whole construction of this furnace, with the large revertible flue, high body or radiator, its large diameter, the large air space in the radiator, both inside and outside, the light of the fire shining on a very large proportion of the heating surface, and all of the heating surface coming in contact with the heat and flame and gases, gives enormous capacity for the purpose of heating air.

The "Perfect" soft coal furnaces are made for the particular purpose of burning soft coal, and with these furnaces soft coal fuel is used successfully by the oxygen air-blast supply through the back of the furnace into and above the surface of the fire as well as into the middle of the fire chamber directly into the body of the coal.

They have a large, high ash-pit. The "Perfect" revolving grate bars are the best grates ever put into a furnace, it is claimed. These furnaces have dust flue, a very large feed door, making it convenient for feeding soft coal, and a large powerful heating surface, long fire travel, cast-iron radiator, particularly constructed so that the heating surface of the furnace is heated by the flame and gases coming in contact with it.

THE CANTON PERFECT BLAST FURNACES.

The Bonnot Co., Canton, O., send us a catalogue describing their extensive line of furnaces. The Canton Perfect Blast furnace is built of the best materials. It has a deep ash pit to prevent the burning out of the grate, and large grate surface. The fire pot being subjected to severe heat is cast very thick and is provided with ribs on the outside to further strengthen it as well as add to its radiating powers. This pot is made as nearly straight as possible. The grates are extra heavy castings of the duplex type, having from three to five bars according to the size of the furnace. The main radiator consists of steel inner heating tubes, 6½ to 8½ inches in diameter, encased by heavy cast iron heads, and an outer radiator shell made of heavy polished steel plate, the whole being firmly hand-riveted and cemented with best asbestos cement. The heads are drawn into place and firmly held with heavy bolts. The entire surface of this radiator is in very close contact with the fire. In the 8 in. steel tubes alone, there are 25 to 36 sq. ft. of live, active radiating surface.

The secondary radiator is made wholly of cast iron, as are also the elbows connecting it with the down-draft flues from main radiator. These parts are joined together with flange connections and fitted with telescopic ends, effectually preventing leakage of gas or smoke, which is so common in furnaces having many sheet iron parts. This secondary radiator retains the unused results of combustion until they give off their heat, and gives effectiveness far greater than the furnace using same amount of fuel without it, it is claimed.

One of these catalogues will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

FLATIRON FURNACE.

The Miskimen Furnace Co., Logansport, Ind., are offering the trade some new furnaces embodying up-to-date and original ideas in their Miskemen and Flatiron furnaces, the latter of which is shown in the accompanying cuts. Fig. 1 shows the Flatiron furnace cased complete with galvanized iron casing, lined on

Fig. 1 Flatiron Furnace with Casing.

the inside with asbestos felt and a corrugated steel lining, which allows one and a half inch air space between outer and inner case. This furnace has large feed and ash pit doors. The bottom of the ash pit is nine inches above the floor, allowing a large air space under the entire length of the furnace.

The fresh air duct can be attached to either side or back of case or can be placed underground.

Fig. 2 shows a longitudinal section through the furnace, showing the interior construction, including improved dumping and shaking grates.

The Flatiron warm air furnace is a combination of

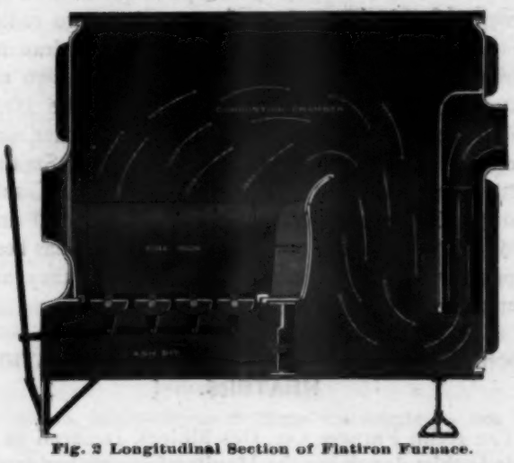


Fig. 2 Longitudinal Section of Flatiron Furnace.

steel and cast iron with permanent gas-tight joints. It has large radiating surface, is self-cleaning and has large air carrying capacity.

Nothing but the best grade of cast iron and cold rolled boiler steel is used in its manufacture.

The quality and weight of the material used in the construction of this furnace insures great durability.

The method of packing and compressing pure asbestos fiber between the cast heads and the steel radiating sheets and holding it securely in place by the use

of retaining strips, secures a permanently gas tight joint between the cast heads and the steel radiating sheets.

The heads are made of heavy cast iron with a two-inch off-set flange near outer edge. This flange forms one member of the improved packing joint. On front head is cast feed and ash pit door shutes and on rear head is cast the smoke pipe collar.

The radiating sheets are made from heavy cold rolled boiler steel formed to the required radius and flanged on the straight edge so as to bolt to the steel bed plate at the bottom and through the steel packing tee at the top.

The crown joint is formed by a heavy steel tee running through the full length of the furnace. The triangular spaces formed by the tee and radiating sheet are packed with pure asbestos fiber.

The joints are packed by a cushion of pure asbestos fiber compressed and held in place by metal retaining strips. This fiber is elastic and never changes its consistency; filling the joints like a piece of rubber.

The fire box linings are made of specially shaped fire clay blocks. These blocks become hot and help to retain and equalize the heat. Being made in sections any part of the fire box can be easily replaced through the feed door.

The grates are heavy dumping and shaking or stationary. They are made in sections and can be easily replaced through the ash pit door.

A RADIATOR AND BOILER EXHIBIT.

The American Radiator Co., Chicago, are arranging a very handsome exhibit at the St. Louis Exposition.

The exhibit, located just north of the "Open Court" of the Manufactures Building, Section No. 6-B, will be in the form of a complete Colonial residence, with the front removed to show the interior and the general application of a modern hot water warming outfit to an average American house.

The interior equipment and furnishings will be very artistic and with the colonial spirit as the dominant architectural feature. It will be furnished with suitable furniture and hangings. Handsome rugs will be laid upon the finished and polished floors. The exhibit will be lighted throughout by electricity with handsome side wall fixtures.

An Ideal hot water boiler will be set up in the basement, and will be connected by regular approved methods of piping to a practical display of American radiators located at the best points to illustrate their fitness to regular and irregular situations. The company makes about 36 regular types, and about 76 irregular types of radiators—for steam and water.

A very notable feature of this exhibit will be the feature of brush decoration of the radiators, in demonstration of the fact that this important equipment of the home can be so decorated as to harmonize perfectly with the color scheme of any room and to assist in its proper ornamentation.

The rooms will include a living room, with a brick fireplace, book case and window seat. This room will show the application of a low radiator under the window seat and an indirect radiator under the floor with an air register over the same.

A conservatory opening off of the living room and connected thereto by French windows, will be fitted with Colonial side wall radiators to show the value of condensed heating surfaces which require no floor space.

The hall will be equipped with a stair-case having white spindles, mahogany hand rails and treads. A neat adjustment of Colonial wall radiators in the stair-case form will here be exhibited.

The dining room will have a seven-foot wainscoting of Flemish oak, a beam ceiling, old fashioned sideboard with diamond pane windows over the board. A direct radiator will be placed in this room.

The bed room on second floor will be finished in a dainty white trim and handsomely decorated. The rooms will be ostensibly lighted by casement windows, which will have old fashioned flower boxes on the outside. Direct radiators suitable for these rooms will be located therein.

The exhibit will show a finely equipped model bathroom with most modern plumbing appliances, and showing a type of American radiator particularly suitable to the contracted spaces available for heating surfaces in the average room of that kind.

SOME FURNACE GEOGRAPHY.

Canandaigua, Mich., is a small place, but 4 Canandaiguans use the Chappell furnace, made by the Chappell Furnace Co., Morenci, Mich.

The heat suffused by 46 Chappell furnaces makes Morenci, Mich., habitable during winter months.

Fremont, Mich., is not a large place, but 14 Chappells have been sold there.

Hudson, Mich., is another small place, but 10 Chappels have been placed there.

Did you ever hear of Auburn, Ind.?

There are 24 Chappells doing good work there.

We offer a prize to anyone guessing in what state Swanton, with 13 Chappells; Sylvania, with 12; Weston, with 7 Chappells, or Oak Shade, with 4 Chappells, is located.

These heavy sales of this furnace in small towns is a striking proof of its merits. If a furnace installed in a small place like Swanton is n. g. its failure is known to all the town and *vice versa* its good qualities lead to numerous sales.

FREE WORLDS FAIR PICTURES.

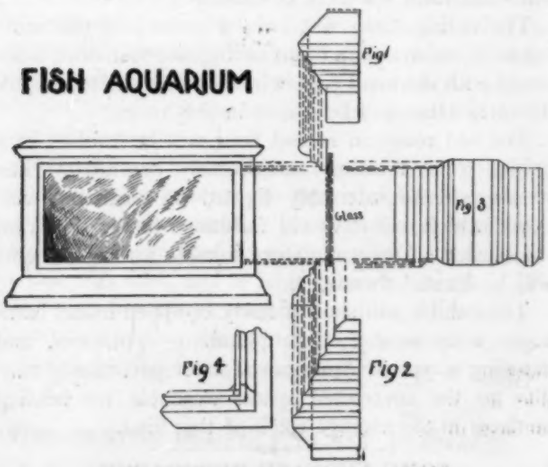
F. A. Palmer, assistant general passenger agent of the Wabash railroad, with headquarters at 31 Marquette Bldg., Chicago, has taken a step which will certainly make him very popular with all who intend visiting the World's Fair the coming summer, as the advertising department of the Wabash railorad has just issued a World's Fair folder containing a colored map of St. Louis and the World's Fair grounds, together with artistic half tones of the principal buildings which will be sent free to anyone writing for same. When writing kindly add: "Saw it in THE AMERICAN ARTISAN."

Tinshop

CONSTRUCTING AN AQUARIUM.

TO THE AMERICAN ARTISAN

I send herewith a pattern for the construction of aquariums, which I think your readers will find useful and profitable. Fig. 1 is the pattern for the upper mold, Fig. 2 for the lower mold, Fig, 3 for the posts, and you get the stretchout for Fig. 3 at the outline of the post at Fig. 4. You will notice the lower mold and



the posts have a socket for the glass and the upper mold has none, so you can easily slip the glass in from the top. In regard to cement, I find from experience that common putty and powdered litharge in about equal quantities, well mixed with boiled linseed oil, is the best.

"READER."

Chicago, April 23, 1904.

SHEET STEEL.

The American Sheet & Tin Plate Co. send us a booklet calling attention to their line of sheet steel products, which include: Bessemer and open hearth (acid and basic) sheets and plates of all finishes, galvanized steel sheets, charcoal hammered bloom galvanized iron sheets, corrugated sheets—black, galvanized and painted, Wood's patent-planished sheets, Wood's refined sheets, Wood's patent-planished locomotive jacket iron, Wellsville polished steel sheets, range steel sheets, round oak stove body sheets, electrical sheets, automobile steel, locomotive jacket steel sheets (for painting), metallic furniture sheets, buggy bow steel sheets, bow socket steel sheets, special grade of steel sheets adapted for deep stamping, conductor pipe and eave trough, "V" crimped roofing sheets, 3 "V" crimped roofing sheets, standing seam roofing, roll roofing, beaded ceiling and siding, imitation brick siding, weather board siding and metal lathing.

Their various plants and the many interesting processes in the manufacture of sheets are shown by dainty half-tones. Much valuable tabular matter and half-tones of the different products of the company are given. This book will be sent free to the trade by addressing W. C. Cronemeyer, 310 Carnegie building, Pittsburgh. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

NOTES AND QUERIES.

GRAND OIL STOVE CO.

From H. W. Reints, George, Ia.

What is the location of the Grand Oil Stove Co.?

Ans.—The Grand Oil Stove Co. have been succeeded by the Novelty Mfg. Co. of Jackson, Mich.

ANGLE IRON.

From Wozab & Ford, Humboldt, Nebr.

Where can we buy angle iron?

Ans.—Birmingham Rolling Mill Co., Birmingham, Ala.; Cambria Iron Co., Johnstown, Pa.; Carnegie Steel Co., Ltd., Pittsburgh, Pa.; Cleveland Rolling Mill Co., Cleveland, O.; Diamond State Iron Co., 29 Broadway, New York; Globe Rolling Mill Iron & Steel Co., 165 W. Pearl St., Cincinnati, O.; H. Lloyd's Sons, Pittsburgh, Pa.; Passaic Rolling Mill Co., Patterson, N. J.; Phoenix Bridge Co., 410 Walnut St., Philadelphia, Pa.; Portage Iron Co., Duncansville, Pa.; A. & P. Robert Co., 261 South 4th St., Philadelphia, Pa.; Tudor Iron Works, 415 Locust St., St. Louis, Mo.; Union Iron & Steel Co., Youngstown, O.

BALTZLY STOVE TRUCK.

From A. A. Leonard, Collins, Ia.

Who makes the Baltzly stove truck?

Ans.—The Arcade Mfg. Co., Freeport, Ill.

CHANNEL IRON.

From Wozab & Ford, Humboldt, Nebr.

Where can we buy channel iron?

Ans.—Globe Rolling Mill Iron & Steel Co., 165 W. Pearl St., Cincinnati, O.; Passaic Rolling Mill Co., Paterson, N. J.; Pottsville Iron & Steel Co., Pottsville, Pa.

CISTERN CLEANERS.

From Louis Nigg, Cascade, Ia.

Where can I buy cistern cleaners?

(Can any of our readers answer this question?—Ed.)

WHITE MOP WRINGER CO.

From Mohr-Jones Hardware Co., Racine, Wis.

Where are the White Mop Wringer Co. located?

Ans.—Jamaica, Vt.

WIRE EAVE TROUGH HANGER.

From Albert E. Scherer, Glenville, O.

Who handles a wire eave trough hanger?

Ans.—Berger Mfg. Co., Canton, O.; Illinois Roofing & Supply Co., Chicago; Milwaukee Corrugating Co., Milwaukee; Berger Bros. Co., Philadelphia; W. J. Burton & Co., Detroit, Mich.; Hopson-Haftencamp Co., Grand Rapids, Mich.; Cream City Cornice Co., Milwaukee; Kanneberg Roofing and Ceiling Co., Canton, O.; J. M. & L. A. Osborn, Cleveland, O.; Garry Iron & Steel Co., Cleveland, O.; J. H. Eller & Co., Canton, O.; Canton Steel Roofing Co., Canton, O.; J. L. Perkins & Co., Chicago.

GERMAN SILVER.

From The Hopson-Haftencamp Co., Grand Rapids, Mich.

Where can we buy German silver?

Ans.—Ansonia Brass & Copper Co., 19 Cliff St., New York; Benedict & Burnham Brass & Copper Co., 211 Lake St., Chicago, Ill.; Bridgeport Brass Co., Bridgeport, Ct.; Chicago Brass Co., Chicago, Ill.; Coe Brass Mfg. Co., Torrington, Ct.; Detroit Copper & Brass Rolling Mills, Detroit, Mich.; Holmes, Booth &

Haydens, Inc., Waterbury, Ct.; Plume & Atwood Mfg. Co., 199 Lake St., Chicago; Reversible Metal Co., Riverside, N. J.; Scovill Mfg. Co., Waterbury, Ct.; Seymour Mfg. Co., Seymour, Ct., and Waterbury Brass Co., Waterbury, Ct.

ITEMS.

L. S. Bonebrake has established a tin shop at Easton, Ill.

The Pope Tin Plate Works of Steubenville, O., were closed down on April 11th last owing to the refusal of the catchers to go to work.

On April 19th the Equitable Guarantee & Trust Co. of Wilmington, Del., was appointed receiver for the Alaska Tin Mining Co., Providence, R. I.

One hundred Evansville, Ind., tinners struck on April 20th last, because one of their workmen had been refused payment for working overtime.

On April 19th, Referee B. L. Butcher, Fairmont, W. Va., gave a hearing to the bankruptcy case of the Morgantown Tin Plate Co., Morgantown, W. Va.

Anthony Schwoerer, Jr., and George Baum are the incorporators of A. Schwoerer & Sons, New York City, capitalized at $20,000 for doing roofing work.

On April 26th last, Daniel G. Reid was elected vice-president of the American Can Co., while F. S. Wheeler was made treasurer and J. H. Sturgis was elected as auditor.

The Cream City Cornice Co., Milwaukee, Wis., send us a circular showing cuts of a number of their goods including cornices, finials, skylights, ventilators, ceilings, conductor pipe, gutters, castings, etc.

Stransky & Co., New York City, have gained a victory before the Board of Re-Appraisement of the U. S. General Appraisers, as the entered values of enameled kitchen iron ware imported by this firm were sustained.

E. V. Shenck, O. M. Robinson and Ellen L. White are the incorporators of the James White Co., Brooklyn, N. Y., capitalized at $20,000, for the manufacture of metal cornices and architectural sheet metal work.

The plant of the McKeesport Tin Plate Company at Port Vue, Pa., was compelled to suspend operations April 25th because of the explosion of the main steam pipe from the boiler rooms to the mill. The explosion occurred early April 25th and filled the mill with steam. The plant resumed work April 26th.

Louis Liedel, a Highland, Ill., tinner, left that place April 25th to work in Delta, O. From the Highland, Ill., Leader of April 26th we learn that "Sunday evening a farewell party was given in his honor by the East End Euchre Club, at which he was also made the recipient of a fine umbrella as a token of esteem from the members of the club."

The Globe Ventilator Co., Troy, N. Y., are manufacturers of the Globe ventilator, which is made in brass and copper, galvanized iron and with glass tops for skylight purposes. It is designed for perfectly ventilating schools, churches, halls, mills, factories and audience rooms of every character. This firm are also manufacturers of the Globe ventilated ridges. They would be pleased to send samples to the trade on application. When writing for same, kindly add, "Saw it in THE AMERICAN ARTISAN."

The Illinois Roofing & Supply Co., 23 Lake street, Chicago, handle an extensive line of roofing and tinning supplies, including galvanized iron, tinplates and metals, patent steel ceilings, corrugated iron, eaves trough, conductor pipe, etc. They send us a sample of the Handy roofing tin which carries 8 pounds of coating to the box. They offer a special price on this terne I C, 20x28 size, when promptly accepted.

The Edwards Mfg. Co., Cincinnati, O., "the sheet metal folks," are sending out some attractive advertising matter, introducing their various salesmen. It shows a man staggering under a load of eave trough, cornices, elbows, etc., while on the obverse side is this interesting little rhyme:

"If a body meet a body
COMING thro' the rye,
If a body meet a body,
Need a body BUY!"

The Cream City Cornice Co., Milwaukee, Wis., are rapidly pushing to the front as manufacturers of cornices, finials, conductor pipe, eave trough hangers and similar goods. Much of their success is due to the untiring energy and rare business acumen of their Mr. Gerhard Aussem. Mr. Aussem is not only a thorough business man with unusually logical mind, but he also has a rare popularity, having been prominently identified with Milwaukee cycling for a number of years. He also served as justice of the peace in that city. He is a young man, being as yet early in the thirties, and has a happy home life.

C. W. Bray of the American Sheet & Tin Plate Co. has designed a semi-continuous tin plate mill which is proving a marked success in the Monongahela tin plate works of that company, located at Pittsburgh. The next application of the continuous process will be in the manufacture of sheets, as this is considered possibly a more attractive field than tin plate. There is a greater variety of sizes to be handled, which is a disadvantage, but, on the other hand, the continuous process only carries the material to a certain point, and as sheets are in general heavier gauge than tin plate, there is less hand finishing remaining with sheets than with tin plate.

Follansbee Bros. Co., Pittsburgh, Pa., are putting the finishing touches on their new tin plate and sheet mill near Wellsburg, W. Va. This plant will contain, when completed, six sheet mills and two tin plate mills, and will be ready for operation about Aug. 1. The hot mill building is under roof and is 60x440 feet, with a 30-foot lean to running the entire length of the building. A 25-ton electric crane is a feature of this structure. The cold mill building, 70x475 feet, contains a 10-ton electric crane, having a 5-ton auxilliary hoist. The tin house is 70-470 feet, and is being equipped with duplex tinning sets of modern design. The boiler house is being equipped with 2,000 horsepower boilers. William Banfield, formerly of the firm of Wallace, Banfield & Co., tin plate manufacturers at Irondale, O., and more recently one of the district managers of the American Sheet and Tin Plate Company, has been chosen as superintendent of this plant.

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Trade Report.

CHICAGO IRON MARKET.

The uninteresting phases through which the local market has been passing during the last month or so still continue, and there is at present little hope for a revival. Melters are not disposed to purchase at the prevailing rate and are merely laying up enough to tide them over present wants. Carload lots have prevailed on the basis of $10 Birmingham for No. 2 foundry.

This lethargy on the part of buyers may have been caused by the reduction of the price of ores, many melters having felt that such a reduction should lower the price of pig iron as well and that this should take effect immediately. The fact of the matter is that the pig iron now selling is the product of ore bought long before the reduction in prices, and that a corresponding reduction in pig iron will not take place for some time, if at all. It is very questionable whether it will affect the pig iron rate even at some future day, as manufacturers are having a rather hard time at present to make both ends meet.

The volume of business during the last week was not exceptionally large, nor was there any very heavy buying, but enough small orders were booked to bring up the general average to satisfactory proportions.

Prices are very firm considering the conditions under which the market is just now laboring, and there is very little prospect of any serious fluctuating in the next few months. The spring weather may, however, call forth increased open-air work, thereby augmenting the demand and raising prices, but such action is rather doubtful.

The principal event of the week was a reduction in the freight rates between the Ohio River and Northern points, to go into effect immediately and continue so until June 30th. This will bring the rate from Birmingham to Chicago down to $3.65. This advantage to southern furnaces has not affected the prices of northern irons as yet and prices continue unchanged.

IRON AND STEEL BARS.

The report that prices have been shaded regularly cannot be verified and we continue to quote the rates given below as the minimum. Orders have been received for full quotas on old contracts, but new business is not active. Prices are as follows, carload lots, mill shipments, Chicago delivery: Bar iron, 1.45c to 1.50c, full extras; soft steel bars, 1.51½c, half extras; with 5c to 10c per 100 pounds extra for less than a carload lot and with the regular extras for less than a ton of a size; angles, less than 3x3, 1.56½c base, half extras; hoops, 1.56½c, full extras. On lots from store, we quote iron, 1.65c; steel, 1.75c base; hoops, 2.10c rates.

SHEETS.

The demand continues uniformly good and the general tone of the market has improved. The following prices can be shaded as much as $2 a ton on carload lots, depending upon the specifications and size of the order. We quote the "official" schedule for mill shipments, Chicago delivery, on one pass, cold rolled, black sheets, as follows: Nos. 16 and 17, 2.16½c; Nos. 18 and 21, 2.21½c; Nos. 22 and 24, 2.26½c; Nos. 25 and 26, 2.31½c; No. 27, 2.36½c; No. 28, 2.46½c; No. 29, 2.76½c; No. 30, 2.86½c. Galvanized sheets, carload lots, mill shipment, Chicago delivery: Nos. 16 and 17, 2.56½c; No. 18 and 21, 2.71½c; Nos. 22 and 24, 2.86½c; Nos. 25 and 26, 3.06½c; No. 27, 3.26½c; No. 28, 3.46½c; No. 29, 3.86½c; No. 30, 4.26½c. On small lots from store, we quote black sheets as follows: Nos. 8 and 10, 2.15c to 2.20c; No. 12, 2.20c to 2.25c; No. 14, 2.30c to 2.35c; No. 16, 2.40c to 2.45c; Nos. 18 and 20, 2.50c to 2.55c; Nos. 22 and 24, 2.55c to 2.60c; No. 26, 2.65c to 2.70c; No. 27, 2.75c to 2.80c; No. 28, 2.80c to 2.85c; No. 29, 2.95c to 3c; No. 30, 3.10c to 3.25c. Galvanized, 75 and 7½ per cent.

STRUCTURAL STEEL.

Business has improved, though the long expected revival has not as yet made its appearance. Labor disputes are reported to be the principal cause of the indifference manifested by projectors. Two rather heavy contracts were closed during the week; one let to the McClintic-Marshall Construction Co., calling for 1,000 tons of bridge material, by the Chicago & Western Indiana R. R., and the other let to the American Bridge Co., for 700 tons, by the Chicago & Northwestern R. R.

We quote carload lots, mill shipments, Chicago delivery, as follows: Beams and channels, 16 inches and under, 1.76½c; 18 inches and over, 1.86½c; universal plates, 1.76½c; angles, 3x3 and larger, 1.81½c; zees, 1.76½c. On lots from store, we quote beams, channels and angles, 3x3 and larger, 2c; 18, 20 and 24 inch, 10c extra; tees, 2.05c rates.

PLATES.

The demand is not strong and mills are far from being swamped with orders. Shading of prices is bruited, but not confirmed. We continue to quote regular prices on carload lots, mill shipments, Chicago delivery: Tank steel, ¼ inch and heavier, 1.76½c; flange steel, 1.86½c; marine, 1.96½c; universal mill plate, 1.76½c to 1.81½c; 3-16 inch tank, 1.86½c; Nos. 7 and 8, 1.91½c; No. 9, 2.01½c; No. 10, 1.91½c; No. 11, 1.96½c; No. 12, 2.01½c. From store, we quote tank steel, ¼ inch and heavier, 2c; 3-16, 2.15c; No. 8, 2.20c; No. 10, 2.25c; flange steel, 2.35c, all f. o. b. warehouse.

MERCHANT STEEL.

Further contracts have been received for specialties from the implement trade. Specifications on old orders continue good, and mills have well filled books.

Prices are unchanged, and we quote carload lots, mill shipments, Chicago delivery, as follows: Spring steel, 2c; sleigh shoe, flat sizes, 1.56½c; concave and convex, 1.76½c; cutter shoe, 2.25c; smooth finished machinery steel, 1.76½c base; smooth finished tire, 1.71½c; plow steel, 2.30c and upward, according to quality; toe calk, 2.06½c base. Ordinary grades of crucible tool steel, 6½c to 8c; special tool steel, 12c and up. Cold rolled shafting, 52 per cent from list in carload lots, and 47 per cent discount in less than car lots.

AXES.

Pioneer handled axes, No. 3 to No. 4 base, are listed at $10.25 per doz.; No. 3½ to No. 4½, advance price, 25c; No. 4 to No. 5, advance base price, 50c per doz.; No. 4½ to No. 5½, advance base price, per doz., 75c.

FAUCETS.

Petroleum faucets, new list, are quoted at 70 per cent off list.

KETTLES.

Maslin kettles are 66 2-3 per cent off.

SCREWS.

Iron bench screws are 40 and 10 per cent off.

WIRE NAILS.

Deliveries can be made on short notice, as the demand has let up to a considerable extent. Prices remain firm and mills are still working heavily. Quotations follow: Carloads to retailers, $2.15 per 100 pounds; less than carloads, $2.25 per 100 pounds, f. o. b. Chicago.

CUT NAILS.

The demand has decreased somewhat, but prices are still adhered to strictly, and mills are running full time. Jobbers sell at from $2.10 to $2.30, base, f. o. b. Chicago, according to customer, size of order, etc.

BARB WIRE.

Business has slackened up sufficiently to allow mills to catch up with their orders. Prices remain as follows: Carloads, to retailers, painted wire, $2.40; galvanized, $2.70; less than carloads, painted, $2.55; galvanized, $2.85; staples to retailers, $2.30 for plain and $2.65 for galvanized.

SMOOTH FENCE WIRE.

Business has improved very slightly and mills are catching up with their orders. There is no prospect of an advance in prices at present. Quotations remain as follows: Smooth wire, sizes 6 to 9, $2.05 per 100 pounds to retailers, in carloads, and $2.10 in less than car lots.

LINSEED OIL.

Demand is very light and no large lots have been disposed of. The price of flax seed has been reduced 10c per bushel in the last few days, but the price of oil remains unchanged, as follows: City raw, in lots of five barrels or more, 42 cents; in lots of less than five barrels, 43c per gallon; state and western raw, 39c to 40c per gallon. Boiled oil, the usual 2c advance per gallon over raw.

COPPER.

Lake copper is quiet and lower at 13⅛@13⅜c; electrolytic, 13⅛@13¼c; casting, 12⅞@13⅛c. The London closing was cabled firm. Standard copper, spot, £58 7s 6d; futures, £58 3s 9d.

The Copper Manufacturers' Association quotes manufactured copper very firm, but still unchanged, on a basis of 18c per lb for sheets and bars. Yellow sheathing material is quoted on a basis of 15c.

PIG TIN.

Pig tin is easier, the New York quotation being 27¾@28c for spot and futures. The closing in London was cabled quiet at £127 5s for spot and £126 7s 6d for futures.

TIN PLATES.

Tin plates are steady and unchanged at jobbing prices: Melyn, $6.50@7; Alloway, $5.75@6.25; coke, $4.87½@6.50; ternes, $5.25@8; additional X, $1.50@1.75 more.

LEAD.

Pig lead is firm, the Smelters' Association still quoting 4.50c for 50-ton lots in New York, and 4.57½c for 25-ton lots, both for future shipment. Spot lots are firm at 4.65c in New York. The London quotation is £12 5s. St. Louis is quiet at 4.40@4.42½c.

Manufactured lead is firm at: Lead pipe, 6½c; sheet, 7¼c; tin pipe, 45c; tin-lined pipe, 12½c; old lead in exchange, 3¾c; tea lead, 3¼c.

SPELTER.

Spelter is easier at: Round lots, New York, 5.20@5.25c for spot and April.

ZINC.

Sheet zinc, cask lots, 6¼c; small lots, 7¼c; St. Louis is quiet at 5.10c; London, £22 7s 6d.

ANTIMONY.

Antimony is firm, with a moderate demand. New York: Cookston's, 7¾@8c; Hallett's, 7¼@7½c; United States, 6¼@6½c; Italian, French and Japanese, 6¼@6½c.

NICKEL.

Nickel, 40@47c for large lots and 50@60c for small lots.

QUICKSILVER.

Quicksilver, New York, $45 per flask for large lots; small orders, $46@46.50; San Francisco, $44@45, domestic orders; for export, $41.50@42; London, £8 5s.

ALUMINUM.

Aluminum, No. 1 ingot, 33c per lb; No. 2, 31c.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$10 25
IC	14x20	6 75
IX	14x20	8 00
IXX	14x20	9 20
IXXX	14x20	11 60
IXXXX	14x20	12 85
IC	20x28	13 50
IX	20x28	16 00
IXX	20x28	18 40
IXXX	20x28	20 80
IXXXX	20x28	23 20

COKE PLATES.

Cokes, 180 lbs.	IC	20x28	8 50
Cokes, 200 lbs.	IC	20x28	8 80
Cokes, 216 lbs.	IC	20x28	9 10
Cokes, 216 lbs.	IX	20x28	11 10

PIG IRON.

Lake Sup. Charcoal	$15 00@$15 50
Local Coke Fdy No. 1	14 50@ 14 75
Local Coke Fdy No. 2	14 00@ 14 25
Local Coke Fdy No. 3	13 50@ 13 75
Local Scotch Fdy No. 1	14 50@ 14 75
Ohio Strong Softeners, No. 1	15 30@ 15 80
Southern Silvery	15 85
Southern Coke No. 1	14 15
Southern Coke No. 2	13 65
Southern Coke No. 3	13 15
Southern Coke No. 4	12 65
Southern No. 1 Soft	14 15
Southern No. 2 Soft	13 65
Alabama Car Wheel	18 85@ 19 35
Malleable Bessemer	14 00@ 14 50
Jackson Co. Silvery	17 80@ 18 30

BLACK SHEET STEEL.

No. 16	per 100 lbs.	$2 55
No. 18-20	per 100 lbs.	2 60
No. 22-24	per 100 lbs.	2 65
No. 25-26	per 100 lbs.	2 70
No. 27	per 100 lbs.	2 75
No. 28	per 100 lbs.	2 85
No. 29	per 100 lbs.	3 15

POLISHED SHEET STEEL.

No. 24 per 100 lbs. $4.90
No. 26 " " $5.00
No. 27 " " $5.10
No. 28 " " $5.20

SMOOTH STEEL.

Wood's Smooth...No. 15-17...... 2 85
" " ...No. 18........ 2 95
" " ...No. 20........ 2 85
" " ...No. 22-24...... 2 85
" " ...No. 25-26...... 3 05
" " ...No. 27........ 3 15
" " ...No. 28........ 3 25

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel.
.... "A" $10 20, "B" $9 20

GALVANIZED IRON

F.O.B. Chicago .... 75 & 5%

HOOP IRON.

¾x22	¾x20	⅞x20
$2 70 100lbs.	$2 60 100lbs.	$2 50 100lbs.
1x20	1¼x19	1½x19
$2 40 100lbs.	$2 35 100lbs.	$2 25 100lbs.

PAINTED CORRUGATED IRON.

8 x 2½ feet Sheets. 28 gage, per 100 lbs. $2 60

SOLDER.

XXX Guaranteed ½&½..per lb. 20¼c
Commercial ½&½........per lb. 19 c
No. 1 Plumbers........ 17¾c

SHEET ZINC.

600 lb. Casks.......base, per cwt. $6.35
300 lb. Casks............per cwt. 6.55
Sheets................per cwt. 6.60

COPPER.

Copper .... base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb........ 35@35½c
Straits pigs, per lb........ 35c
Straits in bars, per lb........ 37c

LEAD.

American Pig........$4 60@4 62½c
Bar 6¾
National (White) brands (in less than 100 lb. lots) per lb........ 7¾

HARDWARE.

ADZES.

Carpenters'.
Ajax .... 35&10%
Blood's .... 40&10%
Hunt's 25%
White's 12½%

Coopers'.
Barton's 20%
White's 15%

Ship.
Ajax 33⅓%
Blood's 37½%
Hunt's 25%
White's 12½%

AMMUNITION.

Caps, Percussion—per 1,000.
F L Waterproof, 1-10s 40c
G D 35c
Eley's 52c

Cartridges.
Peters Rim Fire Ctgs .... 50&2%
Peters Cent Fire, Pistol & Rifle 25&3%
Peters Cent Fire, Military and Sporting Ctgs .... 15&8%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.
Peters Blank Ctgs. 22 cal. $1 18
Peters Blank Ctgs. 32 cal., C. F.. 4 40
Peters B B Caps, Round ball....$1 44
Peters B B Caps, Conical ball...$1 85
Winchester Cent. Fire, Military and Sporting Ctgs .... 15&8%
U. M. C. B B Caps, Con. Ball. $1 85 net
U. M. C. Rim Fire Shot Ctgs. 50&15&3%
U. M. C. Cent. " " 25&15&3%

Primers.
Berdan Primers $1 00
Peters Primers 1 20
Winchester Primers 1 20

Shells.
Peters Empty Paper Shells, 10 and 12 gauge. League .... 25&2%
Peters Empty Paper Shells, 16 gauge. League .... 20&2%
Peters New Victor Nitro Shls. 20&2%
Ideal .... 25&7%
Peters Loaded Shells. League and Referee Semi-Smokeless. 40&1%
Peters New Victor Loaded Shells with King's Smokeless .... 40&6%
Ideals Loaded with King's Smokeless .... 40&10&10&1%
Winchester Blue Rivals } 40&1%
Winchester Yellow Rivals }
Winchester Repeater .... 20&2%
Winchester Leader .... 40&6%
U. M. C. Loaded Shells, Black Powder } 40&1% full cases
Winchester Loaded Shells, Black Powder }

Gun Wads—per 1,000.
Peters Gun Wads 18%
U. M. C. Gun Wads 18%

Powder.			Each
King's Smokeless,		kegs	$11 30
"	"	½ kegs	5 80
"	"	¼ kegs	2 97
"	"	1-lb. cans	51
"	"	1-lb. " rifle	70
Dupont's	"	50-lb. drum	22 45
"	"	25-lb. kegs	11 30
"	"	12½-lb. kegs	5 80
"	"	6¼-lb. kegs	2 97
"	"	1-lb. cans	51

Shot.
Dropshot, sizes smaller than B, 25-lb. bags, per bag $1 60
Drop shot, B and larger sizes, 25-lb. bags, per bag 1 85
Buck Shot, 25-lb. bags, per bag.. 1 85
Chilled Shot, 25-lb. bags, per bag. 1 85

ANVILS.

Trenton, 70 to 80 lbs........ 9¼c per lb
Trenton, 81 to 150 lbs........ 9c per lb

AUGERS.

Boring Machine .... 60&10&5%
Carpenters' Nut .... 60&10&5%
Hollow: Ives' New Pattern 25%
Bonney's—list $30.00 .... 75&5%
Stearn's, No. 1 .... doz. $42 00
Stearn's, No. 3 .... " 33 50

Post Hole.
Dalbey, 8-inch........per doz. $ 5 75
Digwell, 8-inch .... " 13 00
Howe's, 6 and 8-inch.. " 11 00
Iwan's Improved .... 40 & 5%
Vaughan's, 4 to 9-inch per doz. 6 50

Rafting.
Snell's .... 50&5%

Ship.
Ford's, with or without screw, 40-5%
Snell's, " " " 40-5%

AWLS.

Brad, handled .... per doz. $0 28
shouldered, ass'd, 1 to 4 .... per gr. 95
patent, asst'd, 1 to 4 " 90
Harness, common .... " 1 10
patent .... " 90
Peg, shouldered .... " 95
patent .... " 40
Scratch, No. 2, handled... " 4 40
No. 1, socket handled .... per doz, 1 15
No. 20 Hurwood " 2 00
Sewing, common .... per gr. 90
patent .... " 90

AXES.

Boys', Handled:
Camp Fire, 3-lb., per doz $6 25
" " 4-lb., freighters', per doz 7 85
Cast Steel, good grade, pr. dz., 5 80
Pioneer, per doz 7 00

Broad:
Peerless .... 40&10%
Red Warrior, per doz $26 00

Firemen's, per doz .... 1 [illegible]

Handled:
Pioneer 3 in. to 4 in. base, doz 10 25
For 3½ in. to 4½ in. Adv. base 25
For 4 in. to 5 in. Advance base 50
For 4½ in. to 5½ in. Adv. base 75

Single Bitted (without handles)			
Gladstone,	per doz 3 to 4 lbs		$8 50
Hubbard's conc.	"	"	6 75
Hunt's	"	"	6 75
Lippincott's	"	"	6 75
Mann's	"	"	6 75
Pioneer	"	"	7 25
U. S. A.	"	"	9 00
Valley Forge	"	"	6 75
Second Quality	"	"	6 50
Maricopa	"	"	

The above price of 3 to 4 lbs. is the base price.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ advance 75c.

Double Bitted (without handles):				
Lippincott's 3 to 4 lbs	per doz			$9 50
Mann's	"	"	"	9 50
Pioneer	"	"	"	9 25
U. S. A.	"	"	"	11 00
Valley Forge	"	"	"	9 50

The above price of 3 to 4 lbs. is the base price.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lb. advance 75c.

BALANCES, SPRING.

Frary's 50%
Pelouze 20%

BAGS, PAPER NAIL.

Pounds..	3	5	10	16	20	25
Per 1,000.	$1 60	1 85	2 60	3 40	3 90	4 75

BARS, CROW.

Pinch or Wedge Point.....cwt. $2 95

BEAMS—SCALE.

P. S. & W. Co 40%

BEATERS.

Carpet, Rattan .... per doz $2 40
Raymond's Steel Wire, " " 80
Woven Wire, No. 4.. " " 1 10

Egg.
Dover Pattern........per doz. $0 70
Genuine Dover .... " 0 90
Mammoth Dover .... " 1 75
Lightning .... " 0 84
Lyon's (standard size) " 1 75
Whip, French .... " 1 35
Spiral .... " 0 40
Spoon .... " 0 40
Surprise .... per gro. 1 45

BELLOWS.

Blacksmiths' .... 70&5%
Hand, 8 in. .... per doz. $ 6 85
10 in. .... " 8 40
Molders', 12 in .... per doz. 13 00

BELLS.

Call.
2½ in. nickeled bell .per doz. $ 1 35
2¾ in. " brass bell " 3 60
3 in. " " " " 7 50
3 in. " silver alloy bell, ... per doz. 16 50
4½ in. " brass bell and base .... per doz. 14 50

Cow.
Ordinary Goods .... 70&5%
High Grade .... 60&10%
Jersey .... 70&10%

Door.
Bigelow Automatic.. per doz. $9 50
Rotary.
3 in. bronzed iron bell " 5 35
3 in. nickeled " " " 7 50
3½ in. " " " " 9 00

Hand.
Hand Bells, Polished....60@60&10%
White Metal 50%
Nickel Plated 40%
Swiss .... 60&5%
Silver Chime 33⅓%

Miscellaneous.
Church and School, Steel Alloy, ... 50, 10 & 5%

Farm, lbs...	40	50	75	100
Each.	$1 10	$1 30	$1 85	$2 65

BELTING

Leather—List dated Nov. 12, 1901.
Standard 75%
Eclipse .... 60-10&5%
Extra Grade .... 50&10%

Rubber—
Standard .... 75&5%
Amherst .... 65&10%
Extra .... 60&2½%

BEVELS—TEE.

Stanley's, rosewood handle, new list .... 40&5%
Stanley's Iron handle .... 40&5%

BINDING—OIL CLOTH.

Zinc .... 75, & 10%
Brass 75%
Brass Plated .... 75 & 10%

BITS.

Auger.
Extra Double Spur .... 70&10%
Ford's Car and Machine....40&10%
Ford's .... 40&5%
Ford's Ship .... 40&5%
Irwin 45%
New Jenning's .... 50&5%
Russell Jenning's .... 25&10%
Clark's Expansive .... 50, 10&5%
Steer's " Small...... new list $22.00
Irwin Car 45%
Snell's Car .... 60&5%
" Ship .... 40&5%
Ford's " Auger Pattern Car.. 40&5%

Center .... 40&10%

Countersink—
Wheeler's .... per doz. $1 30
American Snail Head " 0 70
" Rose " " 0 80
" Flat .... " 0 70
Buck Bros'. Flat .... " 2 60
German .... " 0 70

Dowel, New Jennings .... 40&10%

Gimlet—
Standard Double Cut 50&5@50&10%
German Pattern......per doz. $0 42
Gouge .... " 0 80
Spoon .... " 0 80
Countersink .... " 1 20

Reamer—
Buck Bros.' ½ Round. " 2 75
" " Square.. " 2 50
Standard ½ Round ... " 0 75
" Square ..... " 0 75
German Octagon.. .. " 0 75

Screw Driver—
Round Shank .... " 0 42
" " extra quality " 1 40
Square Shank .... " 1 10

BLACKING—STOVE. (See Polish.)

BLADES—SAW.

Butchers'—
Standard ¾ & 1¼in .... 60&5%
Clock Spring .... 60&5%
Star 20%

Hack—
Disston's .... 25&5%
Griffin's .... 25&5%
Star 20%

Wood—
Jackson's .... per doz. $3 25
Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.
W. M. & Co.'s No. 20..per doz. $5 50

BLOCKS.

Snatch—
Wooden .... 55&10%
Steel .... 40&10%

Tackle—
Wooden .... 70&5%
Steel .... 50, 10&5%

BOARDS.

Stove 40%

Wash—
Anchor .... per doz. $1 60
Globe .... " 2 10
Banner .... " 2 60
Crystal .... " 3 15
Brass King .... " 3 15
Nickel Plate .... " 3 15
Enamel King .... " 3 15

BOBS—PLUMB.

Carpenters', 8½ oz. iron..pr dz. $0 65
1½ lb. " .. " 1 60
2¾ lb. " .. " 1 80
13 oz. lead.... " 3 00
6½ oz. brass. " 3 30
Mason's, 3 lb. lead .... " 4 00

BOILERS—FARM.

Profit .... 30&5%
Solon .... 25&5%

BOLTS.

Carriage, Machine, Etc.
Carriage, ⅝x6 and sizes smaller and shorter 75%
Carriage, sizes larger and longer than ⅝x6 .... 75@10%
Machine, ⅝x4 and sizes smaller and shorter .... 75&5%
Machine, sizes larger and longer than ⅝x4 .... 75%
Elevator .... 50-10&5%
Plow .... 60&5%
Stove .... 75&10%
Tire .... 72½&5%
Wagon Box Strap .... 70&10%

Mortise Door—
Gem .... 50-10&5%
Ives' .... 50&10%

Barrel—
Cast 50%
Wrought .... 50&5%
" Bronzed .... 75&5%

Flush, Wrought, B. K .... 40&5%

Spring—
Wrought .... 75&10%
" Brass .... 75&10%

Square—
Cast 40%
Wrought .... 60-10&10%

BORERS.

Angular, Miller's Falls, per doz $12 75
Bung, Common Ring with Handle—

Inches	1½	1¾	2
Per doz	$6 00	6 90	8 1

BORERS—CONTINUED.

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....25-10&5%

BOXES.

Nail, No..... 5 10 20
Per doz..... $2 65 10 50 13 00
Wire—
New Langdon.....15&5%
Olmsted's 15%
Stanley's.....30%
Seavey's.....per doz 8 00
Twine, Nos... 20 30 25 121
Per doz $1 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern .....50&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

Hay-Rack, Wenzelmann's No. 1, $12.60; No. 2, $13.20 per doz.
Shelf—
Cast Iron, Plain .....50&10%
Stanley's Wrought Steel.....
.....70-10&2½%
Wire.....75-10&5%

BROILERS.

Wire .....70&10%
Crown, Self-Basting, No.80..doz. $2 90

BUCKETS.

Pump Rubber—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor ..... " 9 50
Star..... " 5 00
IXL..... " 6 75
Well—
Galv'd Qts..... 8 10 12
Per doz $2 50 2 85 3 15
Wooden, top ear, plain, per doz 3 60
" " swivel " 4 85
" side-strap, plain " 3 70
" " swivel " 5 00

BUCKS, SAW.

Folding .....per doz $2 10

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

Cast-Iron.....65&10%
Wrought Brass.....20%
Wrought Steel Bright—
Nos. 800, 804, 808, 810, 814 and 834 .....75&10%
Nos. 838, 840 and 842 .....75-10&10%
Nos. 822 and 823.....80-20&10%
Wrought Steel, Japanned—
Nos. 731 and 737.....70&10&10%

CALIPERS.

Double .....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.

Logger's Boot,(Lufkin R. Co's.) .....per M $3 65
Pos.
Shoenberger.....per lb. 5c
Bessemer ..... " 5½c
American ..... " 7¼c
Swedes..... " 8¾c

CANS.

Cheese Factory Can Stock—
Gallons.... 15 20 30 40
Per set....$3 40 $3 45 $3 70 $4 90
Milk
Elgin Pattern,
Nos.....808, 810, 88.
Gal. 8 10 8
per doz...$22.50 $22.75 $23.15
New Elgin Pattern,
Nos. 106 108 110
Gal. each, 5 8 10
Per doz., $16.75 $18.50 $19.85
Iowa Pattern.
Nos. 508 610
Gal. 8 10
Per doz. $21.50 $22.75
New York Pattern,
Nos. 908, 910,
Gal. each, 8 10
Per doz. $25.15 $26.95
Oil—
1 Gal. glass, Daisy....per doz. $2 35
1 " cushioned " 3 90
Star, gals..... 1 2 3
Per doz..... $1 85 $2 00 $3 90
Per doz.
Champion Faucet, 5 gallon...$ 5 65
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 25
Eureka Pump.....5 " ... 12 25
Wood Jacket.....50-10&5%

CAPS—GUN.

See Ammunition.

CARRIERS.

Hay—
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 50

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....35%
Bed.....60, 10&5%
Common Plate—
Brass wheel..... .....60&10%
Iron and porcelain wheel.60, 10&5%
Philadelphia Plate.....70&5%
Martin's.....40-10&5%
Payson's..... 70&10%
Tucker's—Wood &iron wheel..25&5%
" Rubber wheel..... 15%

CATCHERS—GRASS

Lieder's No. 1..... ...per doz, $6 25
Eureka..... ..... " 4 25
deal No. 4..... 50

CHAIN AND CHAINS.

Breast Chains—
Doubleslack.....doz. pairs $5 75
With Covert snaps " 5 00
" slide..... " 3 25
Without slide..... " 2 85
Bright Ox Chains—
5-16in. $5 65: ¾in. $5 40 per 100 lbs.
Cable Coil Chain—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs....$8 90 $6 60 $5 30 $4 40
Inch ..... 7-16 ½ ⅝ ¾
Per 100 lbs....$4 20 $4 00 $3 85 $3 75
Inch ..... ⅞ 1 1¼
Per 100 lbs.... $3 65 $3 65 $3 65
Cable Log Chain—Advance 35c per 100 lbs. on Cable Coil.
Cow Tie Chains—
American 2 toggle..... 50%
" toggle and snap... 50%
" open and closed ring..... 50%
Halter Chains—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph, " 30%
Jack Chain—
Brass.....60%
Iron.....60%
Picture Chains—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 " ..... " 75c
Pump Chain—Galvanized per 100 lbs..... $4 75
Safety Chain—Brass.....60&10%
Stretcher Chains—
5-16 in., $8.50—¾in., $7.75 per 100 lbs.
Tie-Out Chains—Browns.....70&10%
Trace Chains—Western Standard—
6½— 6-2.....per pair 37c
6½— 8-2..... " 31c
6½— 8-3..... " 30c
6½—10-2..... " 35c
7 — 8-2..... " 35c
7 —10-2..... " 39c
7 —10-1..... " 44c
7 —10-0..... " 55c
Add 2c per pair for Hooks.
" 2c " for Twist Link
Wagon Stay Chains—
Inch ¾ 5-16 ⅜
Per 100 lbs. $6.50 $6.00 $5.50

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL.

In barrels .....per bu. 21c

CHECKS-DOOR.

Blount 30%
Blum-Jap'd, $6.25; Brad., doz... $7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

Box— CHISELS.

Inches..... 10 12 14
Round....per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2.85 3.60 4.20
Cold—
Good quality.....per lb. 12@ 20c
U.S.A.,extra quality..per lb. 28c
Socket, Framing and Firmer—
Barton's..... 20%
P. S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
Tanged, Firmer—
P. S. & W. Co's.....35&5%
With Handles add... per doz. 60c
Choppers, Enterprise Meat—
No. 12..... $2 75
No. 22..... 4 50

CHUCKS-DRILL.

Standard Tool Co.'s 40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6.25
Yankee, for Yankee Screw Drivers..... ..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.90 4.15 4.40
Belle, Barrel..... 70&5%
Common Dash, Gal.... 4 5 7
Per doz..... $7.25 7.75 8.25
Hero.....70%
Union, Gal..... 5 7 10
Each $3.65 3.90 4.75

CLAMPS

Adjustable—Martin's 40%
Carpenters'—Steel Bar..... 30%
Carriage Makers'—P. S. & W. Co.'s.....40, 10&5%
Hose—
Sherman's, brass, ¾ in., ...per doz. 33c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30.00..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... 40%

CLAWS-TACK.

Cast, wood hdle...per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant..... .....per doz. .60

Drain— CLEANERS.

Iwan's Adjustable.....50%
Iwan's Stationary.....40%
Pot—Wire.....per doz. $0.45
Side-Walk—Steel.....per doz. 3.15

XLCR.....65&5%

CLEAVERS.

Family—Ajax, In..... 6 7 8
Per doz $5.50 5.75 6.25

CLEVISES.

Malleable .....per lb. 3¾c

CLIPS.

Axle.....65&5%
Damper—
Standard .....per doz. $0.70
Troy ..... " .28
Hame..... " .30
Emery— CLOTH.
Ajax.....50&10%
B. & A.....50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
Screen Wire—
12 mesh, painted, per 100 sq. ft. $1.30
14 " " " " 1.85

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS--STOVE PIPE.

Inches 5 6 7
Plain Tin....per gr. $2.50 $2.80 $3.75
Japanned Tin, " 3.90 4.20 5.40
Lacquered Brass" 3.30 3.60 4.80

COMBS--CURRY.

Nos. 000 20 221 330 417 416
Per doz. $0.32 .80 1.00 .95 .80 1.00
Nos. 531 532 580 585 545 590
Per doz. $0.96 1.20 1.10 1.65 1.40 1.30

COMPASSES.

Carpenter's..... 70%
Pencil--Faber's.....per doz. $1.00

COOLERS--WATER.

Galvanized Lined—Lever Faucet.
Gal. 2 3 4 6 8
Each $1.35 1.65 2.00 2.35 2.95
Galvanized Lined—Telegraph Faucet
Gal. 2 3 4 6 8 10 15
Ea $1.65 2.00 2.35 2.65 3.30 3.65 4.90
Porcelain Lined—
Gal. 3 4 5 6 7 8 10
Ea $4.50 5.75 7.00 7.75 8.60 10.40 12.25

COPPER—SEE METALS.

COPPERS.

Soldering—1 to 2 lb.....per lb. 25@29c
2 lb. and larger..... " 23c

CORD.

Picture--White Wire--List October 1900.....80&10%
Sash--
Baltic Braided Flax...per lb. 22 c
India Hemp, cable laid " 13 c
" " hawser " " 12 c
" " plain " " 13½c
Italian " cable " " 21½c
Russian " " " " 17 c
Samson, white " " 31½c
" spot " " 30½c
Silver Lake, white " 32 c
" " drab " 29 c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS--SPRING.

All sizes—new list..... 85&10%

COUPLINGS--HOSE.

Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON--SEE TENTS.

CRADLES--GRAIN.

Morgan's Grapevine ..per doz. $22 25

CRAYONS--SEE CHALK.

CROOKS--SHEPHERDS'.

American Pattern .....per doz. $6 75
Montana " ..... " 8 00
Scotland " ..... " 8 00

CROW BARS.

Pinch or Wedge Point, per 100 lbs..... $3 40

CUTTERS.

Meat—
Enterprise Nos. 5, 10, 12, 22, 32, and 42..... .....35%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4.....35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
Pipe-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
Slaw and Crout--
3-knife Crout.....per doz. $9.25
1 " Slaw..... " 1.50
2 " " ..... " 2.10
Washer..... " 7.75

DAMPERS—STOVE PIPE.

Standard.....50&10%
American.....40&10%

DIES--STOCKS AND

Discount.....40&10%

DIGGERS.

Post Hole—
Acme.....per doz. $8.75
Atlas.....per doz. 7.75
Eagle .....per doz. 6 50
Eureka.....per doz. 6.25
Hercules.....per doz. 9.75
Iwan's Split Handle..per doz. $8.00
Iwan's Perfection....per doz. 8.00
Ryan's .....per doz. 17.00

DIVIDERS.

Wing 70%
Extension Wing.....35&5%

DIGGERS--POST HOLE.

Atlas..... .....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules ..... " 10.25
Ryan's..... " 17.00
See also Augers--Post Hole.

DOORS--SCREEN.

⅞ in. 4 panel painted per doz. $ 6.85
1⅛ " " " 7.50
1⅛ in. 3 panel natural pine, fancy.....per doz.. 11.50

DOOR HANGERS—BARN.

Single Flange, D. B. Rail, ...per 100 ft. 1 60
Novelty Check Back, ... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.

Bit Stock.....60%&65&5%
Blacksmith's Twist.....60%
Breast—
Common.....each, $2.25
Millers' Falls..... " 2.10
Hand--
Goodell's Automatic--per doz.
No. 01 No. 02 No. 3 No 20
$7.75 $12.50 $14.25 $11.00
Goodell's Single Gear per doz. $16.00
Millers' Falls " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'.....per doz. $17 00
Bit Stock.
Standard List....60&5%@60%@10%

DRIVERS--SCREW.

Hurwood .....40&10%
Standard.....65&10%
Ajax.....70&5%
Champion.....50%
" Pattern.....75&5%
Clark's Interchangeable.. .... 33⅓%
Edison.....60%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral.....50&10&5%

ELBOWS.

Conductor.....,60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.35 3.00
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 3.50
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.57 .60 .93
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.60

EMERY--TURKISH.

Size .....5-lb. pkgs. ¼ kegs, kegs.
No. 60 to 150, ⅌ lb. 6¼c 4¾c 4½c
Flour..... " 5½c 3¾c 3½c

ENAMEL—IRON.

English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1.25
Peerless 1 50

EXTRACTORS--PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60&10%
Hooks and—
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FAUCETS.

Petroleum, New List 70%
Cork Lined.....60%
Metal Key.....65&5%
See also Cocks.

FILES AND RASPS

Black Diamond.....70&10%
Disston's .....75&10%

FILTERS.

Improved Natural Stone.$3 50@13 50
Subject to large discounts.

FORCEPS—PIG

Barber's.....per do $7 25
Superior..... " 4 75
Whisson's Imp 6 00

FORKS

Barley—
Steel.....60&20%
Wood, 4 tines, $5.50; 6 tines, $6.50 doz
Coal 40%
Coke 40%
Cottonseed 40%
Hay—
Diamond, 2 tine.....50, 10&5%
" 3 " .....60&5%
" 4 " .....60%&10%
Golden Eagle, 3 tine .....60%&10%
" 4 " .....60&10%
Digging..... .....60&10%
Scoop.....35%

FORKS—CONTINUED.

Header—
Diamond, 2 tine.....67¼&10&5%
" 3 " 65%
" 4 " 65%
Golden Eagle, 4 tine.....10&10&5%
Manure—
Diamond.....60, 15&2½%
Golden Eagle.....65¾&10%
Ore.....40%
Spading—
Diamond.....70&2½%
Golden Eagle.....70&2½%

Hack Saw— FRAMES
Crown.....per doz., $ 6 25
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM
Arctic—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 80 2 30
Qts..... 8 10 12 15
Each.....$2 95 3 80 4 50 5 20
White Mountain—
20 qt.—New platform, each...$19.10
25 qt.— " " " ...22.60
25 qt. Sampson Power " ...42.00
40 qt. " " " ...57.00

GAUGES.
Butt and Rabbet.
Stanley R. & L. Co.'s ..20&10&2½%
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc.....
.....50&10%@50&10&5%
Saw—Atkin's sgle. 55c, dbl. 80c pr doz.
Wire.
Disston's.....25%
P. S. & W. Co.'s.....20%

GIMLETS.
Discount.....40@40&10%

GLASS—WINDOW.
Single and double strength, all sizes.....90&10%

GLASSES—LEVEL.
Stanley R. & L. Co.....50&5%

Bulk. GLUE.
B Amber.....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
Liquid.
Eagle.....40 %
LePage's—
List "A".....37½%
List "B".....33⅓%
List "C".....25 %

GOODS.
Bright Wire.....90&5%

GREASE, AXLE.
Wood Boxes.
Diamond.....per gr. $5.00
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 53c, 25 lb. 65c each.
Tin Cans
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon.. " 1.30
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES
Soapstone.....40&10%

GRINDSTONES
Family—In..... 7 8 9
Per doz.....$8 25 9 00 10 50
Loose.
Per ton.....$20 00@$21 00
Mounted—
Ball Bearing..... 1 2 3
Each.....$3 40 3 25 3 15
Common Bearing.. 1 2 3
Each.....$2 90 2 70 2 55

HAFTS—AWL
Brad—Common.....per doz., $0.18
Peg—
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
Sewing—
Common..... " 21
Patent..... " 52

HALTERS
Jute Rope.....per dz $0 80
Sisal Rope..... " 1 95
Web..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED
Blacksmiths' Hand
Maydole's.....40&10%
Engineers'—
Maydole's.....40&10%
Farriers'.
Maydole's.....25&5%
Machinists'.
Maydole's.....40&10%
Nail.
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast..... per doz $1 10@$1 50
Maydole's.....30&7½%
Vulcan.....25&5%
Riveting.
Maydole's.....25&5%
Shoe.
Cast.....per doz 75c
Tack.
All Iron.....per doz $0 25
Pol'd Iron, Hickory hdl " 0 52
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.
Heavy Hammers and Sledges.
Under 5 lbs.....75&5%
5 lbs. and over.....75&10%
Masons'—Single & Double Face..75%
Auger. HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable..... " 2 10
Roger's " ..... " 4 15
Ives' " .....per set 1 25
Axe.....40%
Chisel.
Hickory, Tanged Firmer, Assorted, 24c; Large, 36c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted .....per doz 24c
Coal Pick.....40%
Drifting Pick.....40%
File, assorted 13c, large 18c per doz.
Hammer.
Adze Eye.....per doz 42c
Blacksmiths'.....per doz 45c@65c
Machinists'..... " 39c@58c
Hatchet.....per doz 42c
Hay and Manure Fork.....40&10%
Hoe and Rake.....40&5%
Saw, Plain 72c, Varnished 65c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade.....40%

Barn Door—HANGERS
Cronk's Automobile Loose Axle.....60%
Cronk's Automobile Roller Bearing.....60&20%
Cronk's Loose Axle Endless Run.....60&10%
Cronk's Roller Bearing.....70&5%
King.....per doz. prs., 5 00
Monarch.....60&10%
"Never Jump" Hinge.....50&10%
Peerless, Loose Axle.....60&10%
Perfection, Roller Bearing..70&5%
Phœnix, Roller Bearing....70&5%
Prouty.....per doz. prs., $5 50
Rival..... " " 3 90
Superb..... " " 6 25
Safety Flexible " " 6 65
Wagner's Adjustable.....70@10%
Warehouse.....60%
Conductor Pipe—
Iwan's Perfection.....50%
Parlor Door—
Acme.....per set $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
" New Model..... " 2 80
Prouty..... " 3 00
Richards'.....40-10&5%
Eave Trough—
Baker's.....per gr., $2 35
Imperial.....35%
Wire.....35%

HASPS.
Hinge, Wrought.....70-10&10%
With Staples—See Staples.

HATCHETS.
Ajax.....40%
Blood's.....40%
Cast Claw.....per doz $1 50@$1 75
Cast Shingling..... " 1 20
Duffy's Barrel.....per doz 17 50
Germantown.....35%
Hammond's.....35%
Roger's Ideal.....per doz $5 75
Underhill's Star Lath.....40%
U. S. A.....35%

HAY RACK BRACKETS.
Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

Blind. HINGES.
Clark's Gravity, per doz sets....80c
Parker's.....65%
Shepherd's Noiseless, for Wood casing.....doz. $1 05

Gate.
Clark's, 1 2 3
Hgs & Ltchs, dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only, " .. 0 70 0 75
Knuckle.....per doz prs $6 00
Leed's..... " sets 6 75
Superior..... " prs 9 25

Spring.
American.....25%
Bommer Bros. Ball B'g Floor ...35%
Bommer Bros. Spring Hinges..40%
Chicago.....25&5%
Clover Leaf.....per gro 80
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro $12 00
New Idea..... " 9 60
Oxford.....20%
Wrought Iron.
Light Strap Hinges....80-5-10&10%
Heavy Strap Hinges80-20-10-10&10%
Light T Hinges.....75-10-5-10&10%
Heavy T Hinges.....75-5-10&10%
Extra Heavy T Hinges80-20-10&10%
Cor. Heavy Strap...80-20-10-10&10%
Cor. Ex. Heavy T.....80-20-10&10%
Hart's Heavy Strap.....50&10%
Hart's Ex. Heavy T.....50&10%
Screw Hook and strap.
6 to 12in.....per 100 lbs. $3.65
14 to 20in..... " " 3.40
22 to 36in..... " " 3.15
Screw Hook and Eye.
⅝in.....per 100 lbs. $6.25
⅜in..... " " 7.25
½in..... " 9.00

HOES.
Garden.....70&10%

Grub:
Ajax.....60%
Extra.....65&10%
Hazel.....per doz $5 75
Ladies' and Boys'.....70&12½%
Mortar.....70, 10&10%
Planter's Eye.....62½%
Weed.....66⅔, 10&10%
And Eyes. HOOKS.
Brass.....50&10&5%
Iron.....65&10%
Awning.....per gro $1 80
Bett
Brown's.....70&5%
Jones'.....65&5%
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush
Common Axe Handle .....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Chain—In. ¼&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
Clothes Line.
Japanned.....per doz 21c@22c
Galvanized..... " 35c
Coat and Hat.
Cast Iron.....per gro 72c@$1 00
Gem Wire.....70&10%
Conductor.
Malleable.....50&10%@50&10&5%
Wrought.....40&10%@50%
Corn.
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy,".....per doz. 2 65
Clyde's, ... " 2 40
Brooke's..... " 2 65
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 1
Per doz..... $1 75 $1 80 $1 90
German .....per doz 1 90
Little Giant..... " 3 10
Wood's..... " 1 30
Hammock.
Common..... " 21c
With Plate..... " 36c
With Screw..... " 36c
Piggot's..... " $1 05
Lambrequin or Drapery...per gro 21c
Picture.....50%@50&10%
Potato and Manure.....60&15%
Screw, Brass.....50&20%
(See Goods, Bright Wire.)
Seat Spring.....per lb 5½c

HOOPS—TUB.
Ever Ready..... per case $1 65

HOSE—GARDEN.
2 ply ¾ in. 35 lb. pressure per ft..5½c
3 " ¾ " 50 " " " ..7½c
3 " ½ " 60 " " " ..7 c
3 " ¾ " 60 " " " ..8½c
4 " ½ " 80 " " " ..8½c
4 " ¾ " 80 " " " ..10 c
6 " ¾ " 125 " " " .11½c
8 " ¾ " 150 " " " ..31 c
Cotton ¾ in. 75 lb. pressure per.. c
" ¾ " 150 " " " .9c

Boss. HUSKERS.
Nos. E A B P
Dz. $1 85 $2 00 $1 95 Gr. $5 90 $5 20
Nos. 2000 3000 4000 O OX
Gr. $2 10 $6 75 Dz. $1 15 $2 20 $1 65
Brinkerhoff's.....per gr 14 50
Harrington.....per gr 4 20
Ideal—Nos. 102 101 100
Per doz..... $1 35 $2 50 $2 75
Johnson's.....per gro 7 75

IRON.
See Metals—First column.

IRONS.
Curling.
Common.....per doz 23c@42c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby..... " 1 50
Tourist, Folding..... " 0 90
Pinking..... " 0 60
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list)25&5%
Sad.
Charcoal.....per doz $10 75
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells'..... " 72c
No. 55, " ..... " 69c
Tailors' Sad.....per lb 4¼c
" Geese..... " 4¼c
Tuyere.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 3 60

JACKS.
Locomotive.....75&5%
Wagon.
Meeker's.....per doz $4 25
Miller's No. 2..... " 7
Winner..... " 7

KETTLES.
Brass.....20%
Caldron.....50%
Copper.....per lb 27½c
Maslin.....66⅔%
Sugar.....50&5%

KNIVES.
Beet Topping.
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
Cooper's Hoop.....15%
Corn.
Acorn.....per doz $2 05
Ajax..... " 2 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's.....per doz $3 15
Easy..... " 7 75
Rugged Razor..... " 2 40
H. S. Earle's..... " 3 15
Drawing.
Standard.....70%
Adjustable.....20%
Barton's Carpenters'.....10%
" Folding Handle....25&5%
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Iwan's Sickle Edge..... 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point " 8 75
Hedge.
Ajax, Heavy, $5 75; E Heavy, $7 75 per doz.
Mincing.
Common, Single.....per doz 45c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
Putty.
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.
Base, 2¼-in. Maple, Rubber Tip, ...per gro $1 68
Door, Mineral.....per doz 0 80
Porcelain..... " 0 90
Jet..... " 0 88
Picture.....60&10&5%

LADDERS.
Common Long.....per ft 9c@14c
Extension.....per ft 12c
Step.
Common..... " 7c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.
Bull's Eye Police.
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
Tubular, Beaver.....40&10&5%

LEADERS—CATTLE.
Nos. 1 2 3
Per doz.... $0 70 $0 85 $2 75

LEATHER—LACE.
Cut.....50&10%
Sides, Ex. Quality.....per sq ft 20c

LEATHERS—PUMP.
Valve and Plunger.....50%

LIFTERS.
Stove Cover.
Japanned.....per gro $2 75
Coppered..... " 3 60
Chilkoot..... " 4 12
Devore's..... " 5 50
Zero..... " 3 90
Transom, Payson's.....70&10%

LINES.
Chalk, Twisted in 20-ft hanks.
Nos. 15 14 12 12 11
Per doz.. 10c 12c 17c 23c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz.... 24c 30c 35c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... 23c 25c 32c
Masons', in 100-ft hanks...doz $1 00
Clothes.
60-ft Jute.....per doz $0 95
75-ft " ..... " 1 10
60-ft Sisal..... " 1 60
75-ft " ..... " 2 10
60-ft Cotton..... " 1 35
50-ft Braided Cotton..... 1 10

LINING—STOVE.
In Bricks.....per crate 42c

MACHINES.
Boring Without Augers. With Augers.
Ajax.....per doz $5 25 $6 75
Angular... " 3 25 5 00
Boss..... " 4 50 5 00
Upright... " 3 90 4 00
Leather Riveting.
Chicago, Pomeroy....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss. 1 2 5 3
Per doz.. $57 00 $63 00 $69 00 $80 00
Globe, No. 1.....per doz $56 50
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00

MALLETS.
Carpenters'.
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 25
Tinners'.
Applewood..... " 1 25
Hickory..... " 55
Hickory Sheet Iron. " 80

Door.
MATS.
National Rigid..... 50, 10&5%
Queen Flexible 50%
Stove.
Standrd Quality.....per gross $3 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex. Heavy .....per doz 1 00

MATTOCKS.
Ajax..... .....65&10%
Extra..... 60%

MAULS.
Iron, lbs. 10 13 16 18 21
Per doz. $3 15 $3 85 $4 45 4 75 $5 25
Wood face, lbs. 10 11 12
Per doz..... $4 75 $5 00 $5 25
Wood Choppers'.
Lake Super'r & Oregon Pat.75&10%

MEASURES.
	½ pk	1 pk	½ bu
Galvanized..per dz		$2 75	
Japanned.... "	$1 50	2 25	$2 90
Iron Bound. "	1 40	1 80	2 10

Babbitt.
METAL.
Alm.....per lb 8½c
Best..... " 23c
Common, No. 4..... " 6½c
Copper Mixed..... " 18½c
Magnolia Metal..... " 19c
Tony..... " 10½c
See Metals—In first column.

MICA.
First Quality.....40, 10&5%
Second Quality..... .....60%

MILLS—COFFEE.
Enterprise.....25&5%
National.....30%
Parker.....50&10%@60%

MOPS.
Eric .....per doz $3 15
Handled Cotton.
Lbs. ¾ 1 1¼ 2
Per doz.. $2 00 $2 35 $2 65 $3 25

MOWERS—LAWN.
Ball-Bearing.
In. 15 17 19 21
Each..... $7 50 $8 50 $9 50 $10 50
Champion.
In. 13 14 16 18 20
Ea.. $2 30 $2 35 $2 35 $2 65 $3 75
Champion, High Chief.
In. 16 18 20
Each..... $4 00 $4 50 $5 00
Cheap Grades.
In. 12 14 16 18
Each..... $2 10 $2 10 $2 10 $2 20
Clipper .....50&10&10%
Girard, in. 14 16
Each $3 25 $3 50
Philadelphia.
All Styles Except A & E 60&10&10%
Style A .....50&10%
Style E, High Wheel..60,10,10&10%
Drevels.....50%
All Day.....Net Price
Horse Shoe. NAILS.
Ausable.....50%
Capewell 10%
Perfect.....40&5%
Putnam 10-5%
Star 35%
Picture.
Brass Head.....40&10%
Judd's .....40&10%
Brads.....80&10&10%
Furniture 40%
Wire.
Small Lots..... .....$2.25
Carload " 2 15
Cement Coated 2.10

NETTING—POULTRY.
Galvanized Before Weaving..80&20
" After Weaving...80&15
Cut Pieces.....65&5%

NIPPERS.
End Cutting.
P. S. & W. Co.....40&5%
Stubb's Pattern .....40&10&5%
Hoof.
Heller's.....40&5%
P. S. & W. Co.....40&10%
V. & B 40-5%

Hose. NOZZLES.
Genuine Boston.....per doz $3 15
Genuine Gem..... " 3 15
Magic ..... " 3 40

NUTS—HOT PRESSED.
Square Blank.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
Lb. 9c 6c 4c 3½c 3¼c 3¼c 3c
Square Tapped.
In. ¼ ⅜ ½ ⅝ ¾
Lb. 11¾ 7½ 5¼ 4¾ 4¼
For 5 lb. boxes add ⅛c per lb. to above prices.

OILERS.
Chase Pattern.
Brass and Copper 35%
Zinc.....60%
Engineers'.
Cannon 10%
Tin.....per doz $2 50@$3 00
Machine.
Ajax.....per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron.....40&10&5%
Tin.....per doz 55c@65c

OPENERS.
Box, in. 10 12 14
Flat....per doz $2 85 $3 60 $4 15
Round.. " 2 10 2 25 2 [illegible]
Can.
American.....per doz $0 25
Delmonico..... " 1 35
Never Slip..... " 0 45
Perfect ..... " 55

Tip Top..... " 0 84
Crale, V. & B..... " 5 75

OUTFITS—COBBLING.
Combination ....per doz $11 50
Economical .... " 4 90
Family..... " 10 00

PADLOCKS.
Standard Wrought.....70&10&5%
Champion 50%
Eureka.....40&10&5%
Yale..... .....60&5%

Cream. PAILS.
14-qt., Without Ga....per doz $2 75
20-qt., " " .... " 3 25
20-qt., With Gauge.... " 4 20
Sap, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
Stock, Galvanized.
Quarts. 14 16 18 20
Per doz... $3 75 $4 00 $4 65 $5 25
Water, Galvd, qts. 10 12 14
Per doz..... $1 75 $2 00 $2 25
Wood.
Cable, 2-Hoop, $1 90; 3-Hoop, $2 10 per doz.
Cedar, 3-Hoop, $2 85 per doz.
Standard, 2-Hoop, $1 65: 3-Hoop, $1 85 per doz.

PANS.
Dripping .....50&10&5%
Fry, Common.....60&10&5%
Acme .....60%&5%
Roasting.
Brownie.....Each 30c@37c
L. & H..... " 58c@80c
Building. PAPER.
Plain.....per 100 lbs $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 80
Diamond A, Red Rosin.pr roll 0 60
Leader, Red Rosin..... " 0 50
Sand and Emery.
Ajax.....?.....50&10%
B. & A.....50 & 5%
Wrapping.
Grecian Express .....per lb 2¾c
Rag ..... " 2½c
Apple. PARERS.
Bay State .....per doz $13 00
Reading ..... " 6 75
Turntable ..... " 6 00
White Mountain..... " 5 25
Potato.
Goodsell's Saratoga..per doz. $6 50
White Mountain..... " 6 00

PICKS
Adze Eye Ore.....65&10%
Drifting and Pol. Picks.....60&10%
Ajax Railroad.....60%
Extra Railroad.....65&10%
Surface..... .....65%

PINCHERS.
Carpenters', wrt. iron, pol. steel jaws.....30%
Blacksmiths'.....50%
P. S. & W.....40&10&5%
Clothes. PINS.
Common.....per gr..$0 12
Hoyt's..... " .. 30
U. S..... " .. 70
Picket.
Fluted 15 in.....per doz..$0 70
" 21 in..... " .. 1 60
Spiral ..... " .. 1 90

PIPE.
Conductor.	Nested	Not nested
Eastern, A....75&7½%		75&2½%
Eastern, B.75&10&2½%		75&7½%
Central .....75&7½%		75%
Southwst'n.. 70-&7½%		70&2½%
Texas.....70&7½%		70&2½%
Mo. River....70&7½%		75%
Southern .....70&10%		70&5%
Lead.
Full coils.....per lb..$0 6
Cut " ..... " .. 6¼
Stove.
Acme—In. 5 6 7
Smooth, per jt. 10½c 10½c 12½c
Planished, " ..22c 32c 43 c
Peerless--Smooth..8½c 9c 11½c
Polished. 16c 18c 22 c
Planished 28c 31c 40 c
Made-up—In. 5 6 7
Smooth..... 8½c 9c 12 c
7 to 6 in. Smooth Tapers, pr jt..14c
6 in, Smooth T's..... " ..30c
7 to 6 in. Planished Tapers.....45c
Wrought Iron Gas Pipe.
¼-in., black.....discount, 60%
¼ " .... " 63%
⅜-in. to 4-in , black..... " 69%
4½ " 6 " .... " 65%
7 " 12 " .... " 64%
galvanized
¼ " " " 43%
⅜ " " " 50%
½ " to 4 " " 56%
4½ " " 6 " " 52½%
7 " " 12 " " 50%

PLANES.
Siegley Iron Bench.....50&10%

Corn. PLANTERS.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Potato
Acme.....per doz.. $6 25
Challenge ..... " .. 10 75
Fencing.
Cronk's.....per doz..$9 25
Farmers' Choice..... " .. 8 75
Russell's..... " .. 8 65
Flat and Round Nose.
Bernard's.....30%
German.....50%
Lodi.....40%
Paragon.....40&10%
P. S. & W. Co.....60%

Gas--In. 8 10 12
Per doz.....$3.10 $4.00 $4.90

PLIERS.
Button's--In.	4½	6	8	10
Per doz.....	$2.60	$3.10	$3.90	$5.20
Button' 'attern.				
In.	4½	6	8	10
Per doz. ..	$2.35	$2.50	$3.45	$4.40
Cutting.
Bernard's.....30%
Cronk's Impr'vd Button Pliers.75%
Cronk's Linemans No. 80.....40%
Cronk's Stubbs Pattern ....50&10%
Cronk's No. 1.....60&10%
Cronk's Staple Puller Pliers..$9 00
Lodi.....40&10&5%
4 Tube, revolving.... " .. 5 25
Tinners'.
Hollow.....
Solid.....each..5½c

PLUMBS AND LEVELS.
Common.....75%@75&10%
Cook's.....40%
Davis' Iron 30%
Davis' Inclinometer.....30%
Stanley's
Nos.	00S	0S	2S	3S
Per doz.	$4.50	$5.20	$7.60	$8.65
Nos.	30	35	50	55
Per doz.	$13.00	$17.50	$17.50	$13.35

POINTS. Discount
Drive Well Points.....80&10&5%

POKERS--STOVE.
Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td. coil hdl's.. " 70

POKES--ANIMAL.
American .....per doz.....$2 60
Brown's, wr't steel " ..$5 25@6 25
Eagle..... " $4 25
Success..... " 2 60

POLES--FISHING.
Bamboo
Ft. 12 14 16 18 20
Pr 100..$2.75 $3.40 $4.75 $6.00 $7.75

POLISH.
Metal.
Pride of the Bar..... " .. 1 60
Putz Cream.
Pts.	1-6	¼	½
Per doz.....	$0.84	$1.35	$1.80
Pts.	1	2	4	8
Per doz.	$3.60	$6.00	$9.00	$18.00
White Silk, half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts.	1-6	¼	1	2
Per doz...	$0.68	$1.30	$2.15	$3.00
Shoe.
M. D. C.....per doz..35c@50c
F. C. O..... " 40c
T. M ..... " 50c@$1 25
Imperial.....per gr.....$5 00
Stove.
Black Eagle, 1 lb cans, prgr..$15 00
Black Silk—
5 lb. pail 70c
Paste, 5 oz. cans per doz.....$1.00
Paste, ½ lb. cans, per doz... 1.00
Black and Japanned—
Liquid, ½ pint cans per doz. 1.00
Liquid, 6 oz. cans per doz.... 75c
Steel Range Gloss per doz... 1.75
Blackene, 1 lb cans....pr gr.. 13 00
Black Jack, ¼ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate..... " .. 4 50

POPPERS, CORN.
Round or Square, 1 qt. per doz., $5@95c
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 25
1 qt. reversible .....per doz., 1 50

POTS—FIRE.
Bernz.....each..$3 85
Clayton & Lambert's,each,$4 75@6 25
Gate City.....each.. 6 25
Gem ..... " .. 6 75

POWDER.
See Ammunition.

PRESSES—FRUIT AND JELLY.
Enterprise Manufacturing Co... 25%
Henis .....per doz. $2 10

PRUNERS.
Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%

PULLERS.
Cork.
Modern.....each..$2 60
Quick and Easy..... " .. 2 90
Nail.
Giant.....per doz..$9 00@10 50
Giant Pattern. " .. 00
Tack—Giant .... " .. 60

PULLEYS.
Awning--Jap'd.....40&5% to 35&5%
Clothes Line.....20&10%
Hay Fork.
Iron Wheel, 5 in .....per doz..$1 85
Wood Wheel, 6 in ... " .. 1 80
Wood Wheel, 6 in... pass knot..... " .. 2 25
Hot House--Jap'd .....30&5%
Screw..... " .....30&5%
Side..... " .....30&5%
Sash.
Chicago .....per doz..$0 29
Clark's..... " .. 42
Common Sense, 2 in.. " .. 26
" Pattern, 2 in.. " .. 20
Empire..... " .. 24
Ideal..... " .. 29

PUMPS
Pitcher Spout.
Nos.	1	2	3	4
Each.....	0.9	$1.05	15	$1.40

PLATES--TIN.
See Metals in Column 1.

Spray.
Blizzard.....per doz..$14 25
Cyclone, tin..... " .. 3 90
" copper..... " .. 6 75
Daisy..... " .. 8 75
Little Giant.....each.. 2 40

PUNCHES.
Conductors', No. 22....per doz..$2 50
Machine.....per lb .. 19
Saddlers'.
Common.....per doz..60c@70c
Good..... " ..72c@84c
Spring.
1 Tube .....per doz $2 25

PUTTY.
In Bladders.
Strictly pure .....per 100 lbs. $2 35
Commercial ..... " " 2 10

RAIL.
Barn Door.
Light Wrought.. .....per ft. 3c
Safety .... " 4½c
Single Flange ..... " 1¾c
Smith's Wro't Bracket—plain 3½c
Smith's Special 4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel.....30%
Smith's Milled Steel 4½c
Sliding Door.
Painted iron .....per ft. 4½c
Bronzed wr't iron..... " 8½c

RAKES.
Coal or Road.....per doz. $6.50
Garden.
Cronk's Champion.....70%
Cronk's Victor.. .....75%
Steel, braced .....75&15%
Steel, bow.....70%
Malleable iron, heavy.....70%
Hay—Wood.....per doz. $1 40@2 00
Lawn—Wood.
Common .....per doz. $2 50
Automatic..... " 6 00
New Lawn Queen .... " 3 60
Jumbo, 36 teeth ..... " 6 50

RASPS—See Files.

REGISTERS.
List July 1, 1903
Black and White Japanned .70 to75%
Nickel Plated.....70 to75%
Electroplated, Brass, Bronze or Copper.....70&75%

RINGS
and Ringers—Hog.
Blair's Rings .....per doz. 60c
Blair's Ringers ..... " 84c
Brown's Rings..... " 65c
Brown's Ringers..... " 90c
Champion Rings..... " $2 25
Champion Ringers..... " 1 70
Hill's Rings..... " 48c
Hill's Ringers..... "70c@95c
Mazor Rings ..... " 80c
Mazor Ringers ..... " $1 15
Perfect Rings ..... " 84c
Perfect Ringers..... " $1 05
Wolverine Rings..... " 1 50
Wolverine Ringers.... " 70c
Bull.
Copper,	2½-in.	3-in
per doz.....	$1 35	$1 70
Steel.....per doz. 95 1 05
Steel, Nickel Pl't'd, 2½-in., doz. 1 25
Rea's Self Piercing.. ... " $1.75
Fruit Jar—White .....per lb. 30c
Key.
Split, round.....per doz. 1
Split, square ..... " 32c
Ball, round..... " 32c

RIVETS.
and Burrs.
Copper Belt .....50&10&5%
Coppered Iron 75%
Tinners'.....60%@10%
Hame.....per lb.
Slotted Clinch .....per doz. 40c@45c
Tubular—Nos. 1 and 2, assorted sizes.....per doz. 45c

ROPE.
Per lb.
Manila, 7-16 inch diameter and larger..... 11¾c
Sisal, 7-16 in. and larger..... 8¼c
Cotton.
¼ and 5-16-in. on reels.per lb. 13½c
¼ and 5-16-in. in coils... " 14c

RULES.
Boxwood.....60%
Ivory .....35&5%

SASH WEIGHTS.
Per ton, f.o.b. Chicago.....$30.00

SAWS.
Back.
Disston's.....25&7½%
Jackson's .....25&7½%
Butchers'—Disston's .....25&7½%
Circular.
Disston's.....50%
Hiles' 50-10%
Compass.
Common .....per doz. $1 25@1 60
Disston's .....25&7½%
Cross-Cut.
Atkin's.....40%
Disston's.....40&10% &50%
Pocahontas Bit.....per ft. 30c
Pocahontas, Blued ..... " 41c
Dehorning.
Atkins' .....per doz. $5 50
Disston's ..... " 5 75
Hack.
Disston's 25½%
Keystone 33½%
Sterling Hack Saw Blades.....25%
Sterling Hack Saw Frames.....30%

SAWS—CONTINUED.

Hand and Rip.
Brown's ..... 30&7½%
Disston's No. 7 ..... 30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 ..... 25&7½%
Gorham's Comb ..... 30&7½%
Keystone ..... 30&7½%
Sam Sickles', hand ... per doz. $4 25
"I Will," hand ..... " 5 75
"I Will," rip ..... " 6 75
"U. S. A." hand ..... " 12 25
"U. S. A." rip ..... " 14 25
Keyhole—Disston's ..... 25&7½%
Kitchen
Sterling 25%
One Man 50%
Panel.
Brown's ..... 30&7½%
Disston's No. 7 ..... 30&7½%
Disston's D100 ..... 25&2½%
"I Will" 40%
"U. S. A." ..... 40&10&5%
Pruning.
Avery's Duplex ..... 25&7½%
Brown's ..... 25&7½%
Disston's ..... 25&7½%
Wood.
Common ..... per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever ..... per doz. $ 1.20
Stillman's Lever ..... per doz. 1.30
Leach's ..... per doz. 5.00
Nash's ..... per doz. 4.20
Monarch ..... per doz. 6.50
Alkin's Pattern ..... per doz. 3.50

SAW FRAMES.

Common, plain ..... per doz. $1 20
" painted ..... " 1 60
Counter. SCALES.
Fairbank's Standard ..... 30, 10&5%
Hatch's ..... per doz. $21 50
Little Detective, 1 2 3
Each $2 00 2 25 2 10
No. 1 Tea ..... per doz. 7 75
Union Platform ..... each 2 40
Pelouze 30%
Turnbull's Market 50%
Platform.
Common, 600 800 1000
Each $6 20 8 75 9 50
Chicago Standard ..... 30 to 33⅓%
Fairbank's Standard 40%
Osgood 50%

SCOOPS.

Ames ..... 10&10%
Eastern Pattern. Socket Strap.
Nos. 2 3 4 5 6
Per doz. $7.00 7.25 7.50 7.75 8.00
Nos. 7 8 9 10 12
Per doz. $8.25 8.50 8.75 9.00 9.50
Western Pattern. Socket Strap.
Nos. 1 2 3 4 5
Per doz. $7.00 7.25 7.50 7.75 8.00
Ajax. *Eastern Pattern,*
Nos 2 3 4 5
Per doz. $5.25 5.50 5.75 6.00
Nos. 6 7 8 9
Per doz. $6.25 6.50 6.75 7.00
Ajax. *Eastern Pattern,* extra heavy,
Nos. 3 5 6 7
Per doz. $7.25 7.75 8.00 8.25
Ajax. *Western Pattern,*
Nos. 4 5 6 7
Per doz. $5.75 6.00 6.25 6.50
Nos. 8 9 10 12
Per doz. $6.75 7.00 7.25 7.75

Box. SCRAPERS.

Stanley's Adjustable, per doz. $3 60
Triangular ..... " 2 50
Cabinet.
Ajax ..... per doz. $2 25
Cast Steel ..... " 65c@75c
Stanley's No. 80 ..... " $8 40
Road.
Cubic ft. 7 5 3
Without runners, ea. $4.35 4.10 3.85
With runners ..... " 4.60 4.35 4.10

Bench. SCREWS.

Iron ..... 40&10%
Wood, white maple ... per doz. $3 60
Hand—Wood 20%
Hand Rail ..... 70&10%
Jack ..... 75&5%
Log or Coach 80%
Rule—Centennial.
Nos. 1 2 3 4
Per doz. 23c 25c 32c 36c
Wood.
F. H. Bright Steel ..... 87½, 10&10%
R. H. Blued Steel ..... 85&5%
F. H. Jap'd Steel ..... 82½&5%
F. H. Brass ..... 85&5%
R. H. Brass ..... 80&5%
R. H. Nickel Plated 75%

SCYTHES.

Clipper, grain ..... per doz. $7 75
Dutchman, grass ..... " 5 25
Golden Clipper, grass ..... " 5 00
U. S. A., grass ..... " 5 75
Snell. SETS.
Round, common ..... per doz. $0 33
Square " ..... " 43
Octagon " ..... " 33
Square, Buck Bros. ..... " 1 25
Cup Point, knurled, pr doz. 70c@90c
Steel.
Farmers' ..... per doz. $1 45
Tinners' ..... 50&10%
Saw.
Aiken's Pattern ..... per doz. $3 50
Common Lever ..... " 1 20
Disston's Monarch ..... " 6 50
" X Cut ..... " 11 75
Gorman ..... " 1 25
Morrill's Old Style ..... " 5 00
" Pattern ..... " 4 50
Leach's ..... " 4 80
Nash's Hand ..... " 4 00
" X Cut ..... " 5 50
Stillman's Lever ..... " 1 30
" X Cut ..... " 2 50

SHARPENERS—SKATE.

Diamond ..... per doz. $1 60

SHAVES—SPOKE.

Iron ..... per doz. $1 35@$3 75
Wood ..... " 2 75@ 4 75
Bailey's ..... 50&5%
Goodell's 15%
Stanley's Universal ..... 30&5%
Pruning. SHEARS.
Buckeye, No. 1 ..... per doz. $6 75
" No. 2 ..... " 8 40
California Pat., 9 in. ..... " 4 25
" 10 in. ..... " 5 00
Draw Cut, No. 3 ..... " 14 75
" No. 4 ..... " 17 50
Henry's Pat. 0 01 14 012
Per doz. ... $1.90 $2.50 $3.15 $3.50
Star ..... per doz. $4 75
Sheep—No. BBA.
6 in. 6½ in. 7 in.
Reg. Grip .. $11.25 $11.50 $12.00 doz.
Nar. Grip .. 11.75 12.00 13.00
Tinners'—See Snips.

SHEAVES—SLIDING DOOR.

In. 3 4 5
Common .. Per set .. $0.42 $0.46 $0.70
Hatfield's " .. .75 1.00 1.60

SHELLERS—CORN.

Union ..... per doz. $7 25

SHOT—See Ammunition.

SHOVELS AND SPADES.

Drain.
Iwan's Perfection 50%
Railroad, Etc.
Gold Hibbard's ..... per doz. $9 25
C. H. Conovers' ..... " 7 75
Beckwith's ..... " 7 75
Hickory ..... " 6 25
Greenleaf's ..... " 5 75
Columbus ..... " 5 00
Ames' new list ..... Discount 12½%
Coal.
No. 2 Ajax ..... per doz. $5 25
No. 4 Golds ..... " 6 25
Ames' new list ..... Discount 12½%

SIEVES.

Champion ..... per doz. $ .90
Hunter's Genuine ..... " 1.10
" Imitation ..... " .90
Tin Rim, 16 mesh plain wire " 1.35
Wood " 16 mesh plain wire " .80
Cast Iron. SINKS.
Painted ..... 50&5%
Enameled, White ..... 60-10&5%
Wrought Steel.
Painted, new list ..... 40-10&5%

SLEDGES—See Hammers.

SNAPS—HARNESS.

Champion 65%
German Pattern ..... 30&5%
Judd's Pattern ..... 60&10%@70%

SNATHS.

Double Ring, Bush ..... per doz. $6 75
Patent Loop " ..... " 7 30
" " Grass ..... " 6 50

SNIPS—TINNERS'.

Hernisch's ..... 40&5%
National ..... 40&5%
P. S. & W. Co.'s ..... 25&5%

SOLDER.

See Metals, Column 1

SPRINGS—DOOR.

Perfect. Nos. 1 2 3 4
Per doz. 32c 38c 45c 48c
Reliance, Light $1.40, Heavy $2.20 doz.
Star ..... " .90, " 1.30 "
Torrey's ..... per doz. $1 25
Warner's— No. 11 No. 13
Per doz. 70c $1 30

SQUARES

Steel and Iron 70%
(Add for Bluing, $2.50 per doz., net.)
Mitre—Stanley's No. 12 ..... 40%
Try.
Stanley's No. 20, new list ..... 30&10%
" Nos. 12 and 14 ..... 40%
Try and Bevel—Stanley's ..... 40&5%
Try and Miter.
Fox's ..... per doz. $7 25
Winterbottom's 50%

SQUEEZERS—LEMON.

Common Wood ..... per doz. $0 70
Porcelain Lined, wood ..... " 1 30
Boss, tinned iron ..... " 83
Pearl, nickel plated ..... " 1 30
Star " " ..... " 1 60
Little Giant, tin'd iron ..... " 4 25
King ..... " 2 50
Drum ..... " 4 75

STAPLES.

Blind—Barbed ..... per lb. 9½@10c
Butter Tub ..... " 8@8½c
Fence, less than carload.
Polished ..... per 100 lb. $2 40
Galvanized ..... " 2 70
Netting—Galvanized ..... per keg 3 60
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples ..... 35-10&5%
Extra heavy ..... 75&10%

STEELYARDS.

Discount 25%

STONES.

Axe.
Hindostan ..... per lb. 5½@7c
More Grit ..... " 8½c
Washita ..... " 16½c
Emery ..... 60%@60&5%
Oil—Unmounted.
Arkansas Hard ..... per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ..... " 6½@8½
Oil.—Unmounted.
Lily White ..... per lb 43c
Queer Creek ..... " 14½c
Ouachita ..... " 36c
Washita ..... " 25c
Sythe—Black Diamond, per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum ..... " 7 50
Green Mountain ..... " 4 20
La Moille ..... " 7 00
White Mountain ..... per gro. 6 50
Willoughby Lake ..... " 6 25
Red End ..... " 3 15

STOPS—BENCH.

Hotchkiss' ..... per doz. $3 60

STOPPERS—FLUE.

Common ..... per doz. 42c
Crown ..... " 48c
Gem, flat, painted ..... " 72c
Gem, cor'd, decorated ..... " 68c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense " 95c

STRAPS.

Scoop ..... per doz. prs. $1 80
Skate ..... " " 60@70c
Carpet. STRETCHERS.
Bullard's ..... per doz. $3 90
Excelsior ..... " 6 00
Malleable Iron ..... " 70
Perfection ..... " 6 00
King ..... " 4 50
Wire.
N. S. Elwood's ..... per doz. $5 75
O. S. Elwood's ..... " 5 75
Little Giant ..... " 5 50
Star Lever ..... " 6 25
Star Tackle Block ..... " 9 25
Warner's ..... " 6 25

SWIVELS.

Malleable Iron ..... per lb. 5½c
Wrought Steel ..... per gro. $4 50

TACKS.

American Cut ..... 90&5%
American Wire ..... 85&25&10%
Bill Posters Cut ..... 90&40%
Blued Carpet ..... 90&15%
Tinned Carpet ..... 90&15%
Gimp ..... 90&30&10%
Upholsters' Cut ..... 90&40&5%
Upholsters' Wire ..... 90&25%
Double Pointed ..... 90&20%
Copper ..... per lb 27c
Canvas Nails ..... 75&5%
Clout Nails ..... 75&10&5%
Hungarian Nails ..... 80&5%

TAPES—MEASURING.

Asses' Skin ..... 40&10%
Bend Leather 35%
Patent Leather 25%
Lufkin's Steel 30%
Lufkins Metallic 30%

TENTS AND PAULINS.

Wall Tents ..... 50&5%
Wedge Tents 45%
Paulins 45%
Wagon Covers 45%

THERMOMETERS.

Tin Case ..... per doz., 95c@$1 25
Wood Back ..... " $1 75@ 9 00
Glass ..... " 15 50
Bale. TIES.
Single Loop ..... 80&5%
All other kinds 70%
Cow—See "Chains."

TONGS.

Crimping—Packham's ... per pair 50c
Gutter—P. S. & W. Co.'s ..... 15&10%
Pipe—Brown's 50%
Roofing—P. S. & W. Co.'s .... 15&10%

TOOLS—SAW.

Atkin's Dexter ..... per doz. $4 25
Atkin's Excelsior ..... " 6 25
Disston's Universal 40%
McDonald's 33⅓%
Game. TRAPS.
Newhouse 50%
New Victor 75-10%
Mole—Reddicks ..... per doz. $5 75
House and Rat.
Wood Choker ..... per hole 11c
Tin Choker ..... " 9c
Delusion ..... per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat ..... " $6 75
Marty Rat, Imitation .. " 3 75
Marty Mouse ..... " 3 15
Marty Mouse, Imitation " 2 10
French Automatic ..... each $3 60
Fly.
Balloon ..... per doz. $1 10
Harper's ..... " 1 25
Brick. TROWELS.
Standard 30%
Brade's ..... 10&7½%
Disston's 30%
Rose's 25%
Plasterers'.
Standard 33⅓%
Disston's 30%
W. & McP 25%

TRUCKS.

Bags ..... each $1 70
Handy ..... " 1 50
Warehouse ..... 60&5%
No. 1 2 3
Half Ironed $2.60 $3.40 $5.00
Full Ironed 3.90 5.75 6.75

TUBS—WASH. Ex.
No. 3 2 1 large
Standard, per doz. $5.25 6.25 7.25 9.75
Dowel ..... " 5.60 6.60 7.50 10.00
Cedar ..... " 6.50 7.50 8.25
Indurated. 7.20 7.95 9.45 11.70
Galvanized. No. 1 2 3
Per doz $5.25 5.75 6.50

TWINE. per lb.
3-ply Cotton Wrapping 23c
4 " " " 34c
4 " Cotton Extra Wrapping 29c
3 " " " Hvy. Wrap'g. 27c
4 " " Wrapping on tubes. 23c
4 " " " " cones. 24c
4 " " " " " 24c
India Hemp, ¼-lb. balls 18c
" " ½-lb. " 17c
" " ¼-lb. " ... doz., 65c
2-ply " ¼-lb. " 11½c
3 " " ½-lb. " 11½c
Jute Wrapping, ½-lb. balls 11½c
Jute Wool, 1-lb. balls 6c
Staging, ¾-lb. ball, size 21 ..... 28c
" ¼-lb. ball, " 24 ..... 27c
" ¼-lb. ball, " 27 ..... 37c
Bagging, ¼-lb. ball 22c
3-ply "B" in hanks 19c
4 " "B" " " 19c
3 " "A" " " 29c
3 " Silver Finish, in hanks 39c
Fodder or Lath.
130-strand 8c
200-strand 8½c

VISES.

Bonney's 30%
Cheney's 30%
Parker's Oval Slide ..... 50&50&10%
Parker's Parallel ..... 15&30%
Parker's Victor 10%
Parker's Combination ..... 50&10%
Solid Box ..... 60&5%
Adam's Mechanics' ..... each $2 65
Williamson Universal 30%

WARE.

Cast-Iron Hollow.
Ground ..... 40, 10&2½%
Unground ..... 50, 10&2½%
Extra Finished ..... 40&10%
White Enameled ..... 40&5%
Maslin Kettles 65%
Enameled.
Cherry Blossom 33⅓%

WASHERS.

Standard O. G. cast iron, per lb. .2¼c
Wrought iron in bulk per lb.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
7¾c 5½c 4c 3¾c 3½c 3½c 3¼c
Wrought steel in 5 lb. boxes, per lb.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
8¾c 6½c 5c 4¾c 4½c 4½c 4¼c

WEDGES.

Ax ..... per doz. ... 30c
Galling ..... per lb. .. 10½c
Saw ..... " .. 8½c
Wood Choppers.
Lake Superior and Oregon, Pat ..... per lb. .. 9½c
Reg. Pattern, Steel ... " .03-½c
Truckee " " ... " .03-½c

WEIGHTS.

Hitching ..... per lb. .. 2½c
Sash—F.O.B. Chicago .. pr ton .. $21.00

WHEEL BARROWS.

Common Railroad ..... per doz. .. $16 00
Heavy " ..... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray .. " .. 26 50
No. 04 Steel Dirt ... " .. 47 00
No. 04½ " " ... " .. 50 00

WHEELS.

Corundum ..... 70&10&5
Emery ..... 75&5%
Well. In. 8 10 12 14
Per doz. ... $1.90 $2.20 $3.00 $5.50

WIRE.

Barbed. Painted. Galv'd.
Carloads ... pr 100 lbs .. $2.45 $2.75
Less than car " .. 2.55 2.85
Brass.
In coils 20%
In 1 lb. spools, new list ..... 50&10%
Broom—Tinned ..... 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils ..... 20&10% 33⅓%
In 1 lb. spools, new list ..... 50&10%
Fence—Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.15
Nos. 6 to 9, Galv'd ... " 2.45
Hair—New list ..... 50&10%
Market.
Bright, full bdles ..... 70&10%
Bright, broken bdles 70%
Coppered, full bdles 70%
Coppered, broken bdles ..... 65&10%
Tinned, full bdles ..... 70&5%
Tinned, broken bdles ..... 65&10%
Picture.—In coils ..... 80% @80&10%
In 5 lb. spools ..... per lb. .. 36c
Plain—Small lots $2.00
Car lots 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard 60%
Alligator ..... 65&5%
Always Ready ..... 40&10&5%
Bemis & Call 40%
Coe's Standard ..... 40&10%
Girard's Agricultural 80%
P. S. & W. Co.'s Agricultural 75%
" " Knife H'dle .. 50&5%
Wescott's "S" 33⅓%
Malleable "S" ..... per lb. 06½c
Malleable ..... per lb. 06½c
Stillson Pipe ..... 60&5%
Trimo " 60%
Clothes. WRINGERS.
No. 23, Guarantee ..... pr doz. $26 50
No. 110, Guarantee ..... " 27 50
No. 150, Sunshine ..... " 20 50
No. 130, Mendota ..... " 18 50
No. 12, Success ..... " 17 50
Blue Bell, Ball Bear'g. " 24 50
No. D 110, Domestic ..... " 23 50
No. E 350, Empress ..... " 26 50
No. 122, Bicycle Ball-bearing ..... " 35 50
No. 132, Swan ..... " 35 50

Wants and Sales:

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—A clean stock of hardware and furniture with tinners' tools, with good, established trade. Reason for selling, age and health. Price right. Address W. S. Bellows, Cairo, Nebr. 18

For Sale—For cash, a good clean stock of hardware and tinners' tools in Southern Minnesota; invoice about $5,000; best location in town; good reason for selling. Address K. J., care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

For Sale—Stock of hardware, etc., in Elnora, Daviess Co., Ind.; good farming county, growing town; a splendid opportunity to get a business for about $3,000. Reasons for selling, have made enough money and wish to retire. Harry Dobbs, Elnora, Ind. 18

For Sale—A first-class stock of hardware, with tin shop. Invoice about $2,500.00. Business established 28 years. Reason for selling, death of proprietor. For particulars address G. Middelkamp, Warrenton, Mo. 17

For Sale—Good, clean stock of hardware for sale at reasonable price. Will invoice at about $3,000; wideawake railroad town of about 1,500 people. Store located on main street, new brick building, with very small rent. Very good reasons for selling. Address "Market," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

For Sale—Complete stock of hardware, tinware, stoves, harness, paints, oils, etc., in one of the best farming communities in Northwestern Illinois; also building 30x80, two story. This is a chance to step right into an old established business; stock all bright and clean; no dead stock. Good reason given for selling. Address "O. W.," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

Wanted—To buy stock of hardware in good live town in southern or central Minnesota. Stock to not exceed $2,000, or would consider partnership in some good hardware business. Address 171 East 4th St., Winona, Minn. 17

A rare opportunity to buy an established Tin and Job Shop. It is now in connection with our hardware store and it has always been a profitable part of our business. Our reason for selling is that we can not give it the proper attention. It is well located in a city of 15,000 inhabitants, which is within 20 miles of Chicago. We have been doing work in 10 or 15 surrounding smaller towns. We have installed as many as thirty nice furnaces in one season. The field is large and with a little effort 2 or 3 men can be kept busy. We now have a quantity of work on hand. To the right party we will sell the entire business or one-half interest. Address "M.," care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

For Sale—A clean stock of hardware, furniture and set of tinner's tools and building; stand has been established 8 years. Good town southwestern Minnesota; good country surrounding; the business is paying; good reasons for selling. A fine chance for Scandinavian or German tinner. Price right. Address Lock Box 236, Hardwick, Minn. 17

For Sale—A first-class stock of hardware, stoves, furniture and implements with tinshop. Business established 12 years. Stock can be reduced to $7,000. Write for particulars. Address Box 9, Argenta, Ill. 16

For Sale—A good clean stock of hardware and implements of about $5,000, also good 8-room dwelling house located in good thriving town in Southeast Nebraska. Good established trade of 18 years' standing. No trades of any kind considered. This proposition will bear investigation. For particulars address "Cash," care THE AMERICAN ARTISAN, 69 Dearborn street, Chicago, Ill. 16

For Trade—I will trade good North Dakota or Missouri land for stock of hardware; can arrange to pay some cash; write to owner for square deal. Lock Box 315, Alden, Minn. 16

For Sale—Fairbanks-Morse 60-ton, 36-foot track scale with timber; $300.00 f. o. b. Janesville. Janesville Electric Co., Janesville, Wis. 16

For Rent—Factory building, 124 by 51, two stories, well lighted. Equipped with city water, elevator, office, shafting, steam heat, electric light and power. Located within three blocks of postoffice. Spur tracks of two roads to building. Janesville Electric Co., Janesville, Wis. 16

For Sale—Hardware, etc., with tinshop connected, about $6,000; best location in our Wisconsin town of 5,000 business good, but health poor; don't write without you mean business. Address W. I. S., care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 16

TINNERS' TOOLS.

For Sale—A partial set of tinner's tools. Gone out of the business. Write for list of tools and prices. C. A. Peck Hardware Co., Berlin, Wis. 17

For Sale—Cheap, a brand new No. 130 square shears. E. J. Countryman, Dixon, Ill. 17

For Sale—A complete set of tinner's and cornice maker's tools, including all machines—stakes—8 ft. Robinson Brake, Bertsch combined punch and shear, and all tools found in a first-class manufacturing and jobbing shop. J. H. Jones, Streator, Ill. 17

For Sale—A first-class complete set of tinners' tools; good as new; write for list and prices to Lock Box No. 3, Philbrook, Minn. 16

For Sale—Tinner's tools, all or part of them. Apply Bucholz, 111 Perry St., Chicago, Ill. 14

Bungs and Joints.

The holding capacity and utility of a barrel depends on where and how the bung fits.

Bungs are small, but a bungless barrel or a barrel with a leaky bung is little better than no barrel at all.

The same is somewhat true of a leaking Boiler.

The perfection of small things help very much to make the IDEAL Boilers. Our reliable nipple joints make them *sure* and satisfactory to the user.

Ideal 21-in. Water Boiler.

IDEAL Boilers.
IDEAL Tank Heaters.
AMERICAN Radiators.

AMERICAN RADIATOR COMPANY

282-284 MICHIGAN AVE., CHICAGO.*

BOSTON: 44 Oliver Street.
NEW YORK: 42-44 East Twentieth Street.
PHILADELPHIA: 622 Arch Street.
WASHINGTON: 1201 G. St. N. W.
BUFFALO: 206 Mutual Life Bldg.
MINNEAPOLIS: 204 Fourth Street, South.
ST. LOUIS: 207-209 North Tenth Street.
DENVER: 831 Fifteenth Street.
CINCINNATI: 336 W. Fourth St.
PITTSBURG: 926 Farmers' Bank Bldg.

*Our Chicago Branch Sales Department will not be moved until about May 15th.

HELP WANTED.

YOUNG MAN—With fair business ability, willing to work to prepare for good Gov't Position. Entrance salary $800. Gradual promotion. Permanent. Box 1, Cedar Rapids, Ia.

Wanted—First-class salesman for portion of Ohio. State experience and name references. Rathbone, Sard & Co., Aurora, Ill. 18

Wanted—A good tinner who is willing to work and capable of handling all work in this line; must be honest and sober. Steady work for the right man. Write, stating experience and wages wanted; married man preferred. Address Reinhold & Meyer Mfg. Co., Plymouth, Wis. 18

Wanted—By May 15th, a good tinner for inside and outside work. Write for particulars. Box 236, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

Tinner Wanted—A good all-around man used to furnace work and general jobbing; one who can install hot water and steam plants preferred. State wages for steady job the year round. Smith & Stewart, Austin Station, Chicago. 18

Wanted—Tinner, first-class man for outside tin work and slate roofing. Sober, steady man only need apply, to whom we will give steady employment at $3.00 per day. State full particulars in your first letter. Schiedt Bros., Zanesville, O. 18

Wanted—Right away, quick, a good all-around tinner; one who understands furnace and plumbing work; steady job the year around to the right man; wages $2.25 per day; please send reference and state age, and how long experience at trade. Also whether married or single; write at once to Maher & Son, Preston, Iowa. 18

Wanted—Two first-class tinners, who can do neat shop work; prefer experienced man on metal caskets. Johnson & Roland, Richmond, Ind. 18

Wanted—First-class tinner at once. Lowell Hardware Co., Janesville, Wis. 18

Wanted—A thoroughly competent correspondent. One well conversant with the Metal Ceiling business. The Berger Manufacturing Co., Canton, Ohio. 17

Wanted—At once, good all around tinner; must be sober, good, willing worker; steady job all year around for the right man. State wages wanted and give references. Henry Altorfer & Co., Roanoke, Ill. 17

Wanted—At once, competent tinner; must be able to make estimates for sheet metal work of all kinds from plans, also to do first-class job of furnace work; good wages and steady position to capable man; good town of 15,000 people; growing rapidly; write stating full particulars and wages wanted. Address W. H. Dodge, Waukegan, Ill. 16

Wanted—First-class all around tinner; good wages, steady job for the right man; must be sober and reliable; references. Address "Chicago," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 16

Wanted—A good tinner; one who can do slate roofing; a yearly job at good wages. Apply at once to C. C. Henrie, Xenia, O. 16

Wanted—An experienced pump and wind mill man; one that can make himself useful in a tinshop. This will be a steady job for the right man. Address Box 69, care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 16

Wanted—Tinners; open shop. Barrett Hdw. Co., Joliet, Ill. 16

Tinner Wanted—Who has had experience in plumbing and furnace work; state age and experience. D. L. Baughman, Albion, Ind. 16

SITUATIONS WANTED.

Situation Wanted—By 1st of May; am a good all-around plumber, tinner, do steam, hot water and furnace heating; have had twelve years' experience; can furnish best references; am married; want steady job; state wages in first letter; prefer Iowa. "G. M.," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 18

Wanted—At once, a tinner to do furnace work, pipe work and some plumbing, steady job and good wages. Carpenter & Mather, Stanley, Wis. 15

Wanted—A good tinner who is willing to work and capable of handling all work in his line; must be honest and sober; steady work for the right man; write stating experience and wages wanted. Address "Tinner," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 16

Wanted—A competent salesman to sell splendid specialty to jobbing trade and retail trade. Jobbing trade preferred. Good seller. C. A. Peck Hardware Co., Berlin, Wis. 16

Wanted—A man to sell a first-class complete line of stoves on commission in Wisconsin and Michigan. Address "H. S. C.," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 16

Wanted—Tinner; to a first-class tinner a first-class job all the year round; must be reliable and willing to clerk in store when there is no shop work. W. H. Baker, Benton Harbor, Mich. 15

Wanted—Good tinner at once; steady job to right man. C. J. Stark Co., Ortonville, Minn. 15

Wanted—A good all around tinner; must be a good furnace man, and able to do all kinds of job and piece work, galvanized iron work, and make estimates from plans; steady work the year round for such a man. State wages wanted; must be strictly sober. John Stoazle, Murphysboro, Ill. 15

Wanted—A first-class, sober tinner, that can do plumbing and hot water heating; good, steady position for good man. Write stating wages expected. Warner Hdw. Co., Portage, Wis. 15

Position wanted by May 1. I am a good, all around tinner, strictly sober and reliable. I can do hot water and hot air heating and gas piping. I have also done some plumbing. Address Robert Wilson, Rockland, Mich. 17

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Situation Wanted—By an all around tinner of 20 years' experience; married and of good habits; Wisconsin or Illinois preferred. Address "Wisconsin," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 16

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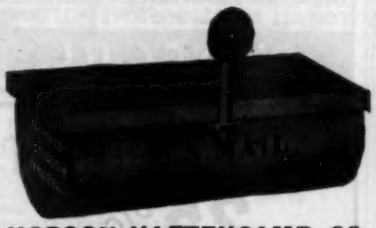

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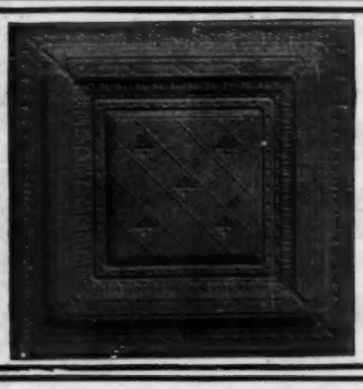

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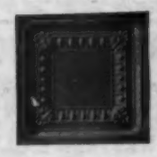

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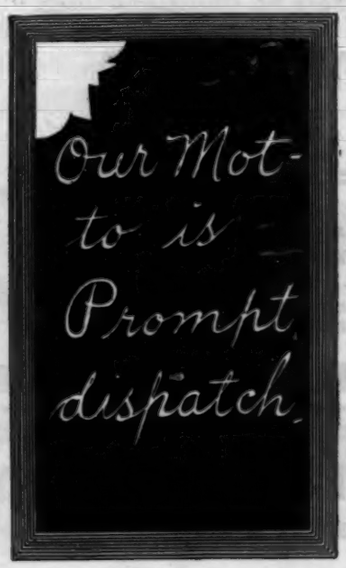

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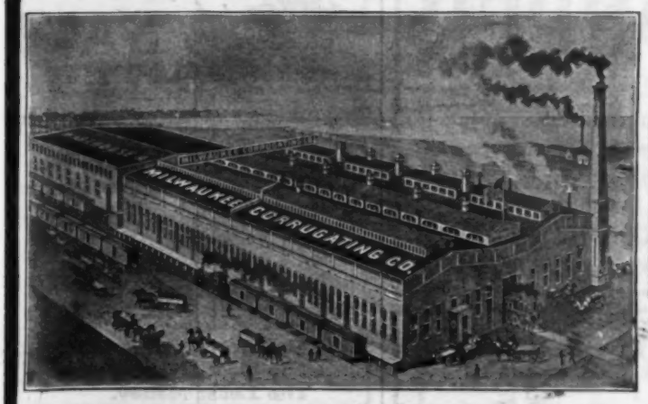

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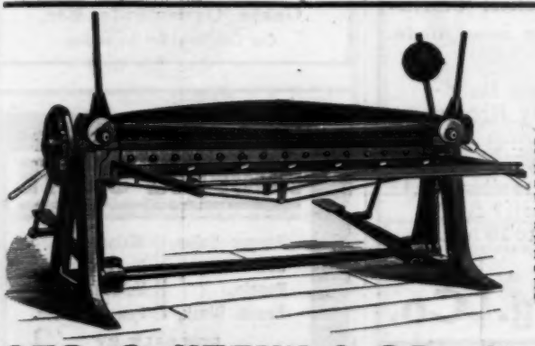

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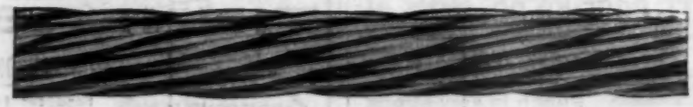

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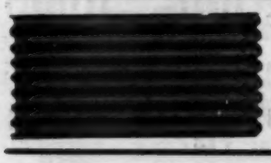
CLEVELAND, O.



WRITE US FOR CATALOGUE AND LOW PRICES ON ***BEST***

STEEL ROOFING, CORRUGATED IRON, ETC.,

We are large manufacturers of these goods and can save you money.

SYKES STEEL ROOFING CO. CHICAGO, ILL. and NILES, OHIO

PATENTED MAY 16, '02.

"HERCULES"

Punch is very strong

Frame being made of semi-steel, punch and die of best tool-steel, and all parts interchangeable. Will punch one-quarter inch hole. Can be had in six sizes—specify sizes wanted. 50 pounds pressure on the handles increased to 1,000 pounds punching force. 100 pounds pressure increased to 2,000 pounds punching force.

Set of three dies furnished with each punch.

H. WEISS & CO., Tinners Supplies. 20 Cliff St., New York.

TINNERS

OR ANYONE

Send for free sample by mail.

Then we will fill your first order of any size F. O. B. factory; cash with order, at the following net prices:

2 in. 45cts per 100	Jobbers write for Prices.
3 in. 50cts per 100	
4 in. 60cts per 100	

E. E. TAFT & CO.

Mt. Pleasant, Iowa.

O'HALLORAN & JACOBS

ROOFING SLATE

SLATERS' SUPPLIES

829-830 Park Building, PITTSBURG, PA.

ROOFING SLATE

SLATE BLACKBOARDS

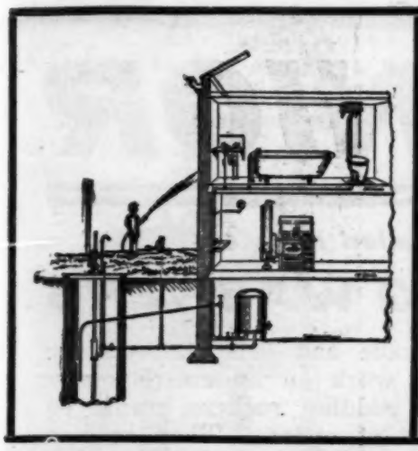
E. J. JOHNSON & CO.

38 PARK ROW NEW YORK

QUARRIES: Pennsylvania and Vermont

Prices quoted delivered anywhere. Booklet and complete Price List on application.

WIRE INQUIRIES GIVEN QUICK ATTENTION



A CITY WATER SUPPLY FOR COUNTRY HOMES

The Horigan Water Works System delivers water from well or cistern to every part of the house and grounds. Can be used with windmill, gasoline engine or hand pump. It enables you to place plumbing in homes which have heretofore been without it for lack of water service. Send for circulars and prices.

Horigan Supply Co., St. Joseph, Mo.

MANUFACTURERS

Contemplating establishing plants in the West should take advantage of a location on

THE NORTH-WESTERN LINE

C.&N.W.R'Y

Chicago & North-Western Ry.

which reaches the famous

WATER POWERS, COAL FIELDS, IRON ORE RANGES, HARD AND SOFT LUMBER DISTRICTS

of the West and Northwest, and affords the best means of transportation to the markets of the world. For further particulars apply to

MARVIN HUGHITT, Jr., *Freight Traffic Mgr.*, E. D. BRIGHAM, *Gen'l Freight Agent*, CHICAGO

The O. K. Steel Brake. Patented March 28, 1901.

BEATS THEM ALL

We have used one of your 8 in. O. K. Steel Brakes for some time and find that it gives entire satisfaction. HUMPHREY & BELL, New York.

WATCH FOR THE NEXT.

Sold by H. Weiss & Co., 20 Cliff St., New York, N. Y. Janney Semple, Hill & Co., Minneapolis, Minn.; C. Sidney Shepard & Co., St. Louis, Mo., etc.; Illinois Roofing & Supply Co., Chicago, Ill.; New Orleans Roofing & Metal Works, New Orleans, La.; Peden Iron & Steel Co., Houston, Texas; Holbrook, Merrill & Stetson, San Francisco and Los Angeles, Cal.

Will not warp like wood.

DREIS & KRUMP, MFRS., 3214 S. Halsted, St., Chicago.

Locations for Industries

Erie Railroad
Chicago to New York.

The Erie Railroad Company's Industrial Department has all the territory traversed by the railroad districted in relation to resources, adaptability, markets and advantages for manufacturing, and can advise with manufacturers in relation to the most suitable locations. The information furnished a manufacturer is reliable and has practical bearing on the nature of his particular industry.

Vast deposits of anthracite and bituminous coal, oil, natural gas—fuel is the paramount factor in manufacturing—sewer pipe, fire and other clays, cement material, gypsum, building stone and numerous other resources exist on the line.

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connecton about every point on the system between New York and Chicago.

The undersigned will be pleased to furnish full information to manufacturers and local parties contemplating the establishment of new industries.

Address, LUIS JACKSON,
Industrial Commissioner
Erie Railroad Company,
21 Cortlandt Street, New York.

OSBORN'S CHARCOALIRON OLD STYLE

Fac-Simile of Stamp.

Going back to the old fashion.

CHARCOAL IRON ROOFING TIN

As made fifty years ago.
Rolled from genuine

CHARCOAL IRON BLOOMS

Write us for prices and full particulars.

THE J. M. & L. A. OSBORN CO. CLEVELAND OHIO

You Can Read This If You Rubber

Louis O. Schuetz, Evanston, Ill., writes:

"I thank you very much for putting my ad. in THE AMERICAN ARTISAN. I have a man now, and would like to have you cancel the ad., because we are getting letters from all parts of the country."

1900 JUNIOR

One of our unrivalled lines of

BALL BEARING WASHERS

Our washers are the best made and most satisfactory machines in the world. They work on an entirely new principle. There are no wheels, paddles, rockers, cranks or complicated machinery to get out of order. They revolve on ball bearings making them by far the easiest running machine made.

We Want One Dealer in Every Town.

"1900" "DOMESTIC" "1900 JUNIOR" "HOME"

EACH A WINNER.

We advertise liberally in magazines and refer all inquiries to nearest dealer. **Send for Catalogue.**

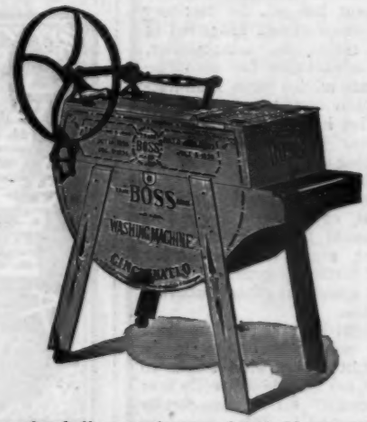
THE 1900 WASHER CO.

BINGHAMTON, N. Y.

"Boss" Washing Machines

Roller gearing of steel; speed, 19 three-quarter reversals to dasher to only 25 turns of wheel. Large tub and rub-block. Stave leg. Cypress tub.

Illustrations represent the two best sellers. Every dealer should handle these two styles. Your jobber has them in stock. When ordering, mention our brands and insist upon getting the genuine article.



Double rub-board and all connections are detachably connected by means of our patent connections. No screws, bolts or cotter pins to manipulate. Its identity known by peculiar shape, but never Boss unless our label appears on casing.

We make twelve (12) styles of washers, covering every style in demand. We want every dealer to have one of our catalogues, latest issue. Write at once. Mention this paper.

BOSS WASHING MACHINE CO., Cincinnati, O.

Peoria Washing Machines

Best in the Market—Made with Ball Bearings

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.

Send for Catalogue. Secure the Agency.

CLARK, QUIEN & MORSE
PEORIA, ILL.

DO YOU RECOGNIZE A GOOD THING WHEN YOU SEE IT?

It's now up to you Mr. Dealer, to satisfy your customer by handling the **BULLARD'S IMPROVED CARPET STRETCHER.** Most complete article made for laying Carpets, for both housekeeper and professional Carpet Layer. Easy seller. Quick profit. Enquire of your live jobber. Manufactured by **GEO. S. KNAPP, Bridgeport, Conn., U. S. A.**

E. H. TITCHENER & CO.

Headquarters for

STAPLES AND THINGS.
Binghamton, N.Y.
and 42 N. Peoria St., CHICAGO.

THE

New York Clipper

IS THE

Greatest Theatrical Paper in America.

All persons interested in the happenings in the

AMUSEMENT WORLD.

Cannot afford to be without it.
PUBLISHED WEEKLY, $4 PER YEAR.
SINGLE COPY, 10 CENTS.
For Sale by all Newsdealers in all parts of the world.

SAMPLE COPY FREE.

Address NEW YORK CLIPPER, New York City.

SUNSHINE

"ALUMYNOID"

WASHING MACHINES.

"White Dasher Line"

Absolutely Rust Proof, with no galvanizing to rub off. Can be used anywhere as water can be boiled without use of a hot cooking stove. With or without gasoline or gas-burning attachments. Sold to only one dealer in each town, and not through jobbing houses.

QUINCY WASHING MACHINE CO.
QUINCY, ILLINOIS

Let the WHITE LILY

Do the Work.

Secure the AGENCY for the

White Lily Washing Machine

It is the Best Seller on the Market.

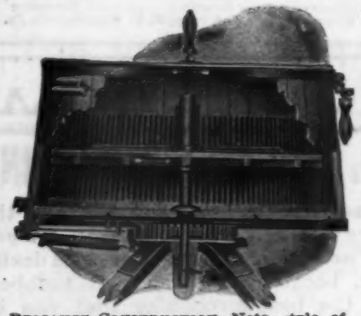
HIGH SPEED LIGHT RUNNING HANDSOME FINISH and GUARANTEED.

Only one dealer in each town can get them. Write for particulars.

WHITE LILY WASHER CO.
TOLEDO, Ohio, - DAVENPORT, Iowa.

"White Lily Washers wash lily white."

THE RELIANCE WASHER



has twice the action on the clothes of any other washer manufactured; will wash a tub of clothes in 5 minutes; cannot get out of order; has full open top; handles turn down at the side, will hold more clothes than any orher washer and will wash them with less exertion to the operator.

RELIANCE CONSTRUCTION—Note style of dolley or dasher and double action mechanism.

FAWKES MANUFACTURING CO.,
INCORPORATED
Minneapolis, Minnesota.

YOU ARE IN BUSINESS TO SAVE MONEY—THEN WHY NOT BUY YOUR

WASH BOILERS

Direct from the manufacturer? I manufacture all kinds and sizes, all with pieced covers.

Try a sample order and convince yourself. I have no salesmen and other expensive help to increase the cost, therefore I can undersell all others in this line. Write for prices.

P. MOSHIEK, 421 So. Halsted St., Chicago, Ill.

The "PARAGON"

CYLINDER WASHER

"Necessity is the Mother of Invention."

That's why we invented the "Paragon." People became disgusted with a washer which required more work to operate than the actual rubbing of the clothes required, which tore lace curtains and overalls alike, and whose down-fall was like that of "the one hoss shay." The "Paragon" is guaranteed to do double the amount of work of any other washer on the market. The "Paragon" is guaranteed not to injure the very finest garments; the "Paragon" is made of galvanized iron. The "Paragon" has no complicated parts and

WILL LAST A LIFETIME.

The following letter is a fair sample of many received daily. The concern named ordered five carloads within three months.

Minneapolis, Minn., April 18, 1904.

MESSRS J. M. GAGAN & CO.

Gentlemen:—

When in Chicago last week, we mailed you an order for two cars of Paragon washers. Since coming home I have arranged to place some of them with other parties who will use quite a quantity of them; for that reason I would like to have you ship forward the first car as soon as possible, and the second car not more than ten days after. Please advise us at once about what date you will be able to ship first car. Yours truly,

McDONALD BROS.

J. M. GAGAN & CO. Manufacturers

CHICAGO, U. S. A.

PECK'S Soft Metal Rivets

For Mending Holes in All Kinds of Kitchen Utensils

Rivets made in 5 sizes. Tool for reaming out holes. Granite and enamel ware can be successfully mended without injury to enamel. No heat required. For sale by jobbers.

E. E. PECK & CO., Batavia, N. Y.

OVER 100,000

OCEAN WAVE WASHERS

Now in use. We sell only to one dealer in each town.
Write for prices and terms.

Voss Bros. Mfg. Co.

DAVENPORT, IOWA.

DISTRIBUTING POINTS:

Kansas City, Council Bluffs, Sioux City, St. Paul, Milwaukee, St. Louis, Indianapolis, Detroit, Columbus, Elmira, N. Y., Albany, N. Y., Philadelphia, Pa.

Pumps and Tubing

Send for Catalog

Galvanized STEEL CHAIN

Sanitary Pump & Tubing Co.

Quincy, Illinois

Do You Know

That the O. K. WASHING MACHINE

is the best made, the lightest running and the most attractive washer on the market? *Are you selling it? If not, why?* Every first-class dealer should sell it, because it is made of the best materials, by the best mechanics that can be obtained, and every one sold will sell another.

Write us for Circulars and Prices.

H. F. BRAMMER MFG. CO. Dept. B. DAVENPORT, IOWA

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12 HOURS 12

St. Louis TO Hot Springs

Arkansas

VIA THE

IRON MOUNTAIN ROUTE

Train leaves ST. LOUIS 8.20 p. m. daily
Arrives HOT SPRINGS 8.00 a. m.

Descriptive and Illustrated Pamphlets FREE on application to Company's Agents.

BISSELL WILSON,
D. P. Agt.,
111 Adams St. CHICAGO, ILL.

H. C. TOWNSEND, GEN'L PASS'R & TKT. AGT., ST. LOUIS, MO.

Have you ever considered the advantage of the

IMPROVED SCHROEDER ROTARY ROLLER GEARING WASHER?

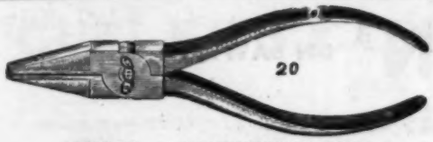
No steam escapes, prevents disagreeable odors from permeating the house, keeps water hot longer, is light running, simple and durable. The most successful rotary washer on the market.

WORKS SO EASILY A CHILD CAN OPERATE IT.

We can tell you more if you want to know, it is to your interest as well as ours. Why not write us?

THE BENBOW-BRAMMER MFG. CO.
ST. LOUIS, MO.

J. F. LEWIS, Cisco, Ill., *writes:*
I cannot get along without THE AMERICAN ARTISAN.



IF YOU NEED A TOOL GET THE BEST

The tools stamped Utica are sterling in quality and workmanship. Forged from the best tool steel, well tempered and fully guaranteed. Send for the Fourth Edition of the **Green Book** of Hardware Specialties for Details.

SMITH & HEMENWAY CO.
Manufacturers of Cutlery and Hardware Specialties.

UTICA DROP FORGE & TOOL CO.
Manufacturers of Nippers and Pliers.

No. 296 Broadway, NEW YORK CITY.

Cronk's Wire Cutter and Bender No. 1.

This plier is made of tool steel and combines both flat and round nose in one, the concave and convex circles between the handles being used for bending wire in any desired shape.

THE CRONK & CARRIER MFG. CO., ELMIRA, N. Y.

ECLIPSE AKRON LEVEL,

No. 22

Made with new patent adjustable attachment. This is a three-piece level with two plumbs working opposite.

It is made for framers and is always right end up.

THE BAKER, McMILLEN CO., AKRON, O.

PERFORATED METAL

THE ROBT. AITCHISON PERFORATED METAL CO.
303-305 DEARBORN STREET, CHICAGO, ILL.

PATENT LIGHTNING PORTABLE PUNCH
No. 3; a high grade tool, adapted to all forms of curved or flangework; pays for itself every week in the year.
Cap 3-16 iron.

For catalog and price address

American Lock Nut Company, Oregon, Illinois.

INDUSTRIES ARE OFFERED LOCATIONS

WITH

Satisfactory Inducements,
Favorable Freight Rates,
Good Labor Conditions,
Healthful Communities,

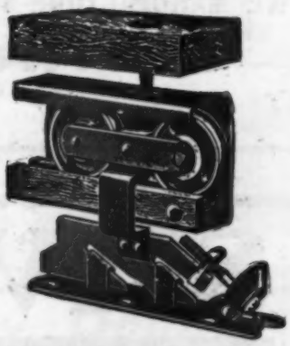
ON THE LINES OF

THE ILLINOIS CENTRAL R. R.
AND THE
YAZOO & MISSISSIPPI VALLEY R. R.

For full information and descriptive pamphlet address

J. C. CLAIR, Industrial Commissioner,
1 Park Row, CHICAGO, ILL.

RICHARDS AUTO



Ball-Bearing, Noiseless, House Door Hanger combines all the best features and is a trade winner.

We make all the leading styles of door hangers for sliding doors. Catalogue free.

THE RICHARDS MANUFACTURING CO.
AURORA, ILL., U. S. A.

Stay-In Flue Stoppers

Brass Finished, Nicely Decorated.

The best flue stop made. Sold with a positive guarantee to be absolutely soot proof. It cannot be jarred or blown from the flue hole.

You cannot afford to be without a flue stop that will stand the above guarantee.

Stuber & Kuck, Peoria, Ill.

Manufacturers of Pieced Tinware and all styles Flour Sifters.

UNION BRICK HANDLER

A Money Saver.

Full size sample.

Delivered-Express
$3.50

Union Brick Bond Co., PITTSBURG, PA.

THE BRAND **'DISSTON'** ON SAWS, ETC.

IS A **GUARANTEE** OF

SUPERIOR QUALITY AND WORKMANSHIP.

SAWS

HAND, BACK, GAUGE, COMBINATION, HACK, JOINERS, KEY-HOLE, NEST, COMPASS, PATTERN-MAKERS, DOVETAIL, MITRE-BOX, PLUMBERS, PRUNING, SQUARE-HOLE, STAIR-BUILDERS, TURKISH, WOOD SAW, BUCKS, RODS, BLADES, WEB, BUTCHER, KITCHEN, DEHORNING, SAWKNIFE, ETC., ETC.
CIRCULAR, BAND, BARREL, BILGE, MITRE, CONCAVE, CYLINDER, STAVE, SEGMENT, RE-SAWS, RIFT, GROOVING, VENEER, SHINGLE, SIDING, TOP-SAWS, SLATE, EDGER, MILLING, DISCS, DEAL, CROSS-CUT, PIT, WHIP, DRAG, MILL, BUTTING, MULAY, GANG, ICE, ETC., ETC.

TOOLS

SQUARES, BEVELS, GAUGES, LEVELS, PLUMB & LEVELS, TROWELS, SCREWDRIVERS, PLUMB-BOBS, STEEL RULES, STRAIGHT EDGES, CABINET SCRAPERS, SLAW CUTTERS, CROUT CUTTERS, SWAGES, SAWSETS, MANDRELS, GUMMERS, SAW JOINTER, SAW CLAMPS, FILES, KNIVES—CLOTH, CORN, CANE, CORK, HEDGE, MACHETTES, ETC.

WE MANUFACTURE THE FINEST AND LARGEST LINE OF SAWS IN THE WORLD.

HENRY DISSTON & SONS, INC.

KEY STONE, SAW, TOOL, STEEL & FILE WORKS,

PHILADELPHIA, PA.

SAVAGE RIFLES

MODEL 1905,

22 Caliber Repeater.

This new rifle has met with the heartiest endorsement of discriminating sportsmen. Take advantage of the demand our extensive advertising campaign will create and carry in stock the best selling high-grade rifles in the market.

THE SAVAGE PLAN

We have built up our business by maintaining prices that give to the dealer a legitimate profit on every Savage Rifle he sells.

Write for details.

SAVAGE ARMS COMPANY, UTICA, N. Y., U. S. A.

BAKER & HAMILTON, Pacific Coast Agents, SAN FRANCISCO and SACRAMENTO, CAL.

The Highest Type of American Cutlery

IS EXEMPLIFIED IN

QUEEN SHEARS

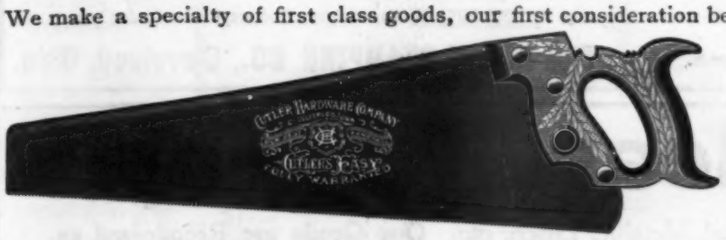
FARWELL, OZMUN, KIRK & CO.,

Wholesale Distributers. ST. PAUL, MINN.

"CUTLER'S EASY" TOOLS AND CUTLERY

ARE THE BEST TO BE HAD.

We make a specialty of first class goods, our first consideration being quality, price next, and this idea is not confined to our special brands *"Cutler's Easy," "Waterloo" and "Red Cedar."*



Our stock of Builders' Hardware, Hay Carriers, Bale Ties, Woven Fencing, Alaska Refrigerators, Freezers, Screen Doors, etc. is Complete and we solicit your mail orders.

Cutler Hardware Company, Waterloo, Iowa.

THE KING
Cream Separator

separates all the cream. No cranks to turn, no crocks or pans to wash, no skimming to do, no water mixed with the milk. Highest points secured on butter, several thousand sold last year, all giving good satisfaction, price within the reach of all. Write for terms and prices. Mention this paper.

CHAS. A. VAN PELT,
Bloomington, Ill.

THE CLARK NOVELTY CO.

Rochester, N. Y., U. S. A.
Contractors and Manufacturers of

Metal Specialties

LIGHT MACHINERY, SPECIAL TOOLS, AIR COMPRESSORS, SMALL BRASS PARTS, PATTERNS, MODELS, EXPERIMENTAL WORK, ETC.

The Manufacturing of **BRASS FAUCETS** of any size, style or description is one of our Specialties.

THE BOSS CREAM SEPARATOR

Is the most convenient device for Farmers and Dairymen to handle their milk and cream summer or winter. No cheap tin gauges or small faucets used in the construction of this machine. We want one agent in every town to put them out on ten days trial and if they do not sell same may be returned to us at our expense. Send for catalogue showing different styles and sizes.

BLUFFTON CREAM SEPARATOR CO., Bluffton, Ohio.
Geller-Ward & Hazner Hdw. Co., St. Louis, Mo., West. Dist'b.

THE LATEST IMPROVED CREAM SEPARATOR.

The best cooling process. The milk tank is detachable.
Our Separator is guaranteed to do the work.

The cheapest and best deep setting Separator on earth.

WRITE FOR PRICES.

SEITHER-CHERRY CO.
KEOKUK, IOWA.

Jersey Double Cream Separator

MILK AND WATER ARE NOT MIXED

The best and most reasonable priced double separator on the market. Easily cleaned, simple and effective.

We also manufacture the Jersey Single Separator. Write us about them.

Galesburg Cornice Wks., Galesburg, Ill.

STAR HACK SAWS

They cost a trifle more at the start, but are ten times the cheapest in the end. We repeat that it requires something more than steel, teeth and holes to constitute a Hack Saw Blade. You cannot buy a good pocket knife for 10 cents, or the best Hack Saw Blades at price of inferior goods.

Prominent dealers the world over sell ★ Blades | **Every genuine blade is stamped with a ★**

MILLERS FALLS COMPANY, 28 Warren Street, NEW YORK, N. Y.

GEO. W. BROWN, Jr., Hillsboro, Ill., writes:

"You may kindly discontinue our WANTED TINNER ad. that you have so kindly carried for us the past three issues. I have received replies from Vermont to Dakota and think that we have secured a good man."

Their Good Reputation Easily Accounted for

Our Patented Plain-Back Shovels are not the common kind. The hold four inches nearer the blade, gives more leverage and makes work much easier. They do not break when the back wears thin. Hence, last again as long as other plain-back shovels. We also make hollow-back shovels, spades and scoops. High Grade.

Have you our prices, and catalogue of "NEVER-BREAK" Steel Spiders, Griddles, Kettles, Garden Trowels, etc.

The first and only makers of "NEVER-BREAK" goods. **THE AVERY STAMPING CO., Cleveland, Ohio.**

Measuring Tapes

Steel, Metallic, Linen, etc. Our Goods are Recognized as the Best. Tinners' Rules, Magic Pattern Rules, etc. Send for Catalogue and Mention The American Artisan.

Lufkin Rule Co.

SAGINAW, MICH.

Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS Sold by All Hardware Dealers

NEW BRITAIN, CONN.

THE TAYLOR & BOGGIS FOUNDRY CO.

CLEVELAND, OHIO

MANUFACTURERS OF **LIGHT GRAY IRON CASTINGS**

Builders' Hardware, Dampers and Damper Clips, Oil and Gas Stoves, Furnace Lamps, Molasses Gates, Letter Boxes, Hardware Specialties.

FOX SHAVING SETS

Every article in this set is guaranteed. The razor is a Fox, which is known all over as the best made. It retails for $3.

FOX CUTLERY CO.
DUBUQUE, IOWA

M. Hosterman & Son, Marshfield, Wis., write

"You may take our ad out of THE AMERICAN ARTISAN as we have bought a kit of tools. We received 8 or 10 replies to the ad and think your paper all right."

THE POPULAR LINE

with three elegant trains each way between Chicago and

LaFayette, Ind.
Indianapolis, Ind.
CINCINNATI, OHIO.
Louisville, Ky.

and all points in the

SOUTH AND SOUTHEAST

is the

BIG FOUR ROUTE

Buffet Parlor Cars, or Dining Cars on day trains and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. For reservations, etc., call on or address

J. C. TUCKER,
Gen'l Northern Agent,
238 S. Clark St., CHICAGO, ILL.

Iwans Patented **Improved Post Hole and Well Auger**

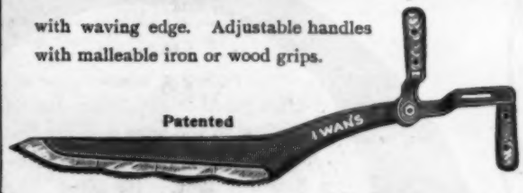
For fence, telephone, telegraph and electric light post holes, wells, prospecting, earth testing, plumbing etc

Sizes 4, 5 6, 7 8, 9 10 and 12 inch, regularly made and carried in stock at all times.

IWANS Serrated Hay Knife

with waving edge. Adjustable handles with malleable iron or wood grips.

Patented



Cutting edge of four serrated sections of high grade tool steel rivited to strong malleable iron bar. Packed in boxes of one-half dozen and one dozen.

Sold by Hardware and Implement Jobbers everywhere. Complete discount sheet on entire line mailed to the trade on request.

IWAN BROTHERS Mf'rs of Hardware Specialties **Streator, Ill.**

4 in. I-Rack Brackets

Makes Wagon Box, Hay, Hog and Wood Racks made from best malleable iron.

Farmers seeing these will have no others.

Over 30 Jobbers ve them, including

Hibbard, Spencer, Bartlett, & Co. Chicago, Ill.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Norvell, Shapleigh & Co. St. Louis, Mo.

Price to Dealers, $2.00. Retail, $2.75.

To get them introduced will make 3 Sets for $6.00, F.O.B. at any station east of Missouri River. This offer is good for first order only. 2% 10, 30 net if ordered at once direct from me.

Ask for Circulars and further Information.

J. T. SWAN, Auburn, NEB.

"LIGHTNING" AND "BLIZZARD"

FREEZERS

THEY ARE Well Advertised, In Demand, Easily Sold, Satisfactory in Use, Of Known Reputation.

THEY EXCEL IN Easy Running, Quick Freezing, Economy, Convenience, Practical Results.

NORTH BROS. MFG. CO.
PHILADELPHIA, PA.

Designed to fill the demand for

A COMBINED SIFTER DREDGE Tomato, Fruit and Wine STRAINER

Provided with a removable agitator, thus permitting the article to be closely nested for shipping.

Manufactured only by

J. L. Clark Hardware Co.
ROCKFORD, ILL.

SPERRY'S CALDRONS

Twelve sizes always in stock.

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

D. R. SPERRY & CO. Hollow-Ware Founders, **BATAVIA, ILL.**

8½ inches long. Jaws take from 7/16 to ¾. Cuts bolts for pump rods.

Will Remove "NEVERSLIP" and "ROWE" CALKS
The Best Wrench Made

SPECIAL WRENCH FOR PUMP RODS.

Has more uses than any wrench made.

You can't break the jaws off this wrench.

Every one buys **HAWKEYE WRENCH** on sight; all that's necessary to sell it is to show it. It should be in every Hardware Store. Be the FIRST in your town to have it in stock.

SOLD BY ALL JOBBERS.

HAWKEYE WRENCH CO., Mfrs., Marshalltown, Ia

Made in two styles—different size thread for Pump Rods.

THE CLEVELAND & BUFFALO Transit Company

C&B LINE

CONNECTING **CLEVELAND and BUFFALO** "WHILE YOU SLEEP"

UNPARALLELED NIGHT SERVICE. NEW STEAMERS.

"CITY OF BUFFALO" and "CITY OF ERIE"

Both together being, without doubt, in all respects the finest and fastest that are run in the interest of the traveling public in the United States.

TIME CARD
DAILY INCLUDING SUNDAY

LEAVE		ARRIVE	
Cleveland	8 P.M.	Buffalo	6:30 A.M.
Buffalo	8 "	Cleveland	6:30 A.M.

CENTRAL STANDARD TIME

Orchestra Accompanies Each Steamer

Connections made at Buffalo with trains for all Eastern and Canadian points, at Cleveland for Toledo, Detroit and all points West and Southwest.

Tickets reading over L. S. & M. S. Ry. will be accepted on this Company's Steamers without extra charge.

Special Low Rates Cleveland to Buffalo and Niagara Falls every Saturday Night, also Buffalo to Cleveland.

Ask Ticket Agents for tickets via C. & B. Line
Send four cents for illustrated pamphlet.

W. F. HERMAN, G. P. A., Cleveland, Ohio.

Thompson Bros., Muscatine, Ia.
Writes: "Please stop our ad. for Tinner. The first issue brought results."

We're not particular whether you use pencil or pen—either one will do—just so you write to us and find out full particulars regarding our New Oil Stove. It's called

NESCO-LAMP-STOVE

You can't help but create a demand for this stove—it certainly is a dandy—an addition to any hardware or stove dealer's line.

We have done everything in our power to make this stove nearer perfection than any stove ever manufactured. Write to our nearest office for particulars.

National Enameling & Stamping Co.

MILWAUKEE CHICAGO NEW YORK
BALTIMORE ST. LOUIS
NEW ORLEANS

Advertising on Windows

The manufacturer who, in this enlightened age, is laboring under the false impression that the *Dealer will not apply signs to his windows, fails to appreciate the needs of the Dealer and the advantage to himself.* Especially is this true where goods are sold under a trade-mark or a special brand. It is desirable that goods be sold under a trade-mark, that *people* become so *familiar with a particular or distinctive sign* that the minute they see it there flashes to their mind the *article that the sign represents.* The Dealer does not put in stock goods that do not sell, if he can help it. The Dealer also expects the manufacturer or the jobber to supply him with advertising matter, *and the most appreciated, most desirable and far-reaching is the*

Opalescent Transfer Window Sign

which he can apply to his window and feel that he has something in harmony and in keeping with his surroundings, and something that is equal in appearance to the finest hand-painted sign.

It is so constructed that it does not obstruct light, on account of its being openwork.

A sign should be one of sufficient quality and beauty to make a favorable impression, otherwise it is a waste of effort and money. The manufacturer cannot reach anything like the circulation by any other means of advertising that he can by the transfer sign process.

The signs made by The Meyercord Company are mailable and unbreakable, as for instance, glass, celluloid, cardboard, etc. and do not cost a great deal for transportation: a penny will take a sign anywhere in the United States.

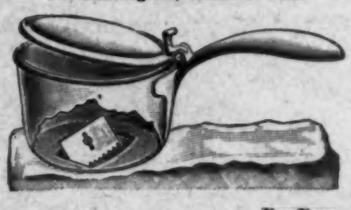
All you have to do is to advise your Dealers that you are getting out a handsome transparent sign and ask them to apply these to their windows, and in ninety-nine cases out of a hundred they will thank you for your interest in them, and will be pleased to avail themselves of the advertising value of the sign.

You can get catalogs and price and any other information desired by writing

The Meyercord Company,
Chamber of Commerce Bldg. CHICAGO.

STANDARD FOR QUALITY "ENTERPRISE"

ICE SHREDDERS
For Shaving Ice, Coarse or Fine.



	Per Doz.
No. 33, Tinned, -	$6.00
No. 34, Nickeled, -	15.00

LAWN SPRINKLER

No. 1, - - $3.50

FOOD CHOPPERS

No. 100 - $1.50
No. 300 - 2.25

Rapid Grinding and Pulverizing Mills
43 Sizes and Styles for Hand, Steam and Electric Power.

No. 2, - $3.75

CHERRY STONERS
5 Sizes and Styles, Tinned or Japanned

No. 1, - $7.50 per Doz.

ORDER THROUGH YOUR JOBBER. CATALOGUE MAILED FREE.

THE ENTERPRISE MFG. CO. OF PA., PHILADELPHIA, U. S. A.

You Would be Surprised at our prices for **ROOFING TIN**

If you had an idea of the quality. The fact that we make all our own plates explains why we can furnish such material for the price. A postal will get you sample set "A."

THE McCLURE COMPANY
PITTSBURG PHILADELPHIA
MILLS: Washington, Pa.

BRADLEY SHELF BRACKETS

STRONG, LIGHT AND ALL RIGHT

ATLAS MFG. CO. NEW HAVEN, CT.

THE "CENTENNIAL" Rain-Water Cut-Off

The strongest, most durable and cheapest CUT-OFF on the market.
The only single Cut-off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers. Patent applied for.
Manufactured only by
COONEY & GEIGER,
19 and 21 E. South Street
INDIANAPOLIS, INDIANA.

"PULLMAN" Sash Balances

Are you selling them? In use everywhere. Look for the Metal Tapes in All New Buildings. . .
Folder No. 2 sent free.

PULLMAN MFG. CO.
Rochester, N. Y., U.S.A.

OSGOOD STANDARD SCALES

For Store, Factory and Farm
OSGOOD SCALE CO.,
BINGHAMTON, - NEW YORK

STEVENS FIRE ARMS

are the logical line for the Dealer to handle. Our goods are in constant and steady demand because of their meritorious properties, and make the **Stevens** a **profitable** line for the dealer to handle.

We Make
Rifles from $3.00 to $150.
Pistols from 2.50 to 50.
Shotguns from 7.50 to 35.

ALL JOBBERS HANDLE THE STEVENS. SEND FOR CATALOG.

J. Stevens Arms & Tool Co.
197 Main Street.
CHICOPEE FALLS, MASS.

We Have Swell Designs
IN OUR CLASSIFIED METAL CEILINGS.

And we have a variety too. We can give you designs in Greek, Romanesque, Rococo, Empire, Colonial, Italian Renaissance and French Renaissance.

OUR METAL CEILINGS

are made to last, besides are cheap. Are you in the market? Our catalogue and our prices can be had for the asking

ILLINOIS ROOFING & SUPPLY CO.
23 E. LAKE ST., CHICAGO.

"EAGLE" BRAND COPPER RIVETS AND BURRS

STANDARD FOR QUALITY. (Lake Superior Copper)

MANUFACTURED BY

THE PLUME & ATWOOD MFG. CO.

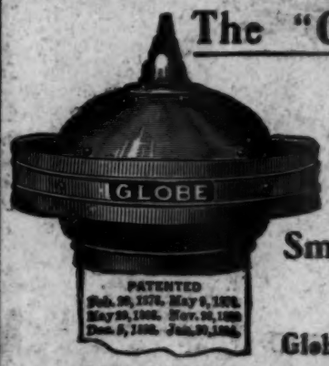
29 Murray St., NEW YORK. 196 Lake St., CHICAGO

Champion Stove Clay

The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb. and 10 lb. pasteboard boxes.
Order it from your jobber.
The best and most refractory lining made.

BRIDGEPORT CRUCIBLE CO.
BRIDGEPORT, CONN.

The "Globe" Ventilator



In Brass, Copper, Galvanized Iron, and with Glass Tops for Skylight purposes.

For Perfectly Ventilating

Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.

Smoky Chimneys Cured.

"Globe" Ventilated Ridges. Send for Pamphlet.

Manufactured by
Globe Ventilator Co., Troy, N. Y.

Put This Down as a Fact

When a man insists on having **Atkins Saws,** you may know that he has used them before and knows what he's talking about. It's no use to offer something "just as good", because he'll have **Atkins Saws** if he has to go elsewhere to get them.

It's better to be on the safe side and have a line of **Atkins Saws** always in stock. They're good for your store.

Have you a copy of our 1904 Catalog? Free.

ATKINS ALWAYS AHEAD

If It's Silver-Steel It's an ATKINS

E. C. ATKINS & CO.,
Indianapolis, Ind.

Branches
MEMPHIS, TENN.
ATLANTA, GA.
NEW YORK CITY
TORONTO, CANADA.
CHICAGO, ILL.
MINNEAPOLIS, MINN.
PORTLAND, OREGON.
SEATTLE, WASH.